

# TEACHERS of CHILDREN WHO ARE BLIND

*A Report Based on Findings from the Study  
"Qualification and Preparation of Teachers  
of Exceptional Children"*

Prepared by ROMAINÉ P. MACKIE, *Chief*, Exceptional Children and Youth, Office of Education  
and

LLOYD M. DUNN,  
*Coordinator of Special Education*, George Peabody College for Teachers  
in collaboration with:

WILLIAM M. CRICKSHANK, *Director*, Education for Exceptional Children, Syracuse University, New York

GEORGE LEE ABEL, *Consultant in Education*, American Foundation for the Blind

JOHN W. JONES, *Consultant*, Visually Handicapped, Oregon State Department of Education, Salem

EDITH COMON, *Supervisor*, Braille and Sight-Saving Classes, Detroit Public Schools

J. M. WOOLLY, *Superintendent*, Arkansas School for the Blind

U. S. DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE

MARION B. FOLSOM, *Secretary*  
Office of Education, SAMUEL MILLER BROWNELL, *Commissioner*

This publication is a part of the broader study

## Qualification and Preparation of Teachers of Exceptional Children

Conducted by the Office of Education, and made possible by the co-  
operation of many agencies and individuals, and with the special  
help of the Association for the Aid of Crippled Children,  
New York City

ROMAINE P. MACKIE ..... Director of the Study.  
LLOYD M. DUNN ..... Assistant Director, and Coordinator of Special  
Education, George Peabody College for  
Teachers, Nashville, Tenn.  
FRANCES P. CONNOR ..... Research Associate, and Assistant Professor,  
Special Education, Teachers College, Co-  
lumbia University, New York City

### COMMITTEES AND CONSULTANTS FOR THE STUDY

#### Policy Committee\*

GALEN JONES (*Chairman*); *Director*, Council for the Advancement of Second-  
ary Education, Washington, D. C.  
W. EARL ARMSTRONG, *Director*, National Council for Accreditation of  
Teacher Education, Washington, D. C.  
FRED F. BEACH, *Chief*, State School Systems, Office of Education.  
HERBERT S. CONRAD, *Chief*, Research and Statistical Standards, Office of  
Education  
BESS GOODYKOONTZ, *Director*, Comparative Education Branch, Office of  
Education  
ARTHUR S. HILL, *Educational Director*, United Cerebral Palsy, New York  
City

---

\*At the time the study was started, all were staff members of the Office of Education.

#### IV TEACHERS OF CHILDREN WHO ARE BLIND

##### National Advisory Committee

- GWEN RETHERFORD (*Chairman*); *Director*, Education of Exceptional Children, Kentucky State Department of Education
- WILLIAM M. CRUICKSHANK, *Director*, Education for Exceptional Children, Syracuse University, New York
- FRANCIS W. DOYLE, *Chief*, Bureau of Special Education, California State Department of Education
- SAMUEL A. KIRK, *Director*, Institute of Research for Exceptional Children, University of Illinois
- MRS. HAZEL C. MCINTIRE, *Director*, Division of Special Education, Ohio State Department of Education
- HERSCHEL W. NISONGER (*alternate*), *Director*, Bureau of Special and Adult Education, Ohio State University
- JOHN W. TENNY, *General Adviser*, Department of Special Education and Vocational Rehabilitation, Wayne University, Detroit, Mich.
- HARLEY Z. WOODEN (*ex officio*) *Executive Secretary*, International Council for Exceptional Children, Washington, D. C.

##### Consultants

- LEO F. CAIN, *Dean*, Educational Services, San Francisco State College, California
- ANNA M. ENGEL, *Formerly Director of Special Education*, Detroit, Mich., Public Schools
- RALPH R. FIELDS, *Director*, Division of Instruction, Teachers College, Columbia University, New York City
- JOHN J. LEE, *Chairman*, Department of Special Education and Vocational Rehabilitation, Wayne University, Detroit, Mich.
- MARY FRANCES MARTIN, *Supervisor of Special Education*, Los Angeles, Calif. Public Schools
- ROBERT H. MORRISON, *Assistant Commissioner for Higher Education*, State of New Jersey
- FRANK J. O'BRIEN, *Formerly Associate Superintendent*, New York City Public Schools

##### Special Consultants

- LEONARD W. MAYO, *Director*, Association for the Aid of Crippled Children, New York City
- MRS. ALICE FITZ GERALD, *Associate Director*, Association for the Aid of Crippled Children, New York City



v

**Committee on Competencies Needed by Teachers of Children Who Are  
Blind**

GEORGIE LEE ABEL (*Chairman*); *Consultant in Education*, American Foundation for the Blind, New York City

IONE BIGGS, *Teacher*, Texas School for the Blind, Austin, Tex.

Mrs. FLORENCE HENDERSON, *Assistant Professor*, San Francisco State College, California

PAULINE POWERS, *Teacher*, Braille Classes, Youngstown, Ohio, Public Schools

GERALDINE SCHOLL, *Elementary Supervisor*, Michigan School for the Blind, Lansing, Mich.

EDWARD J. WATERHOUSE, *Director*, Perkins Institution and Massachusetts School for the Blind, Watertown, Mass.

EVERETT E. WILCOX, *Principal*, Oregon State School for the Blind, Salem, Oreg.



# CONTENTS

	Page
FOREWORD .....	IX
ACKNOWLEDGMENTS .....	X
INTRODUCTION .....	1
A Project Was Undertaken .....	3
What This Publication Contains .....	4
 COMPETENCIES NEEDED BY TEACHERS OF BLIND CHILDREN .....	 5
The Competency Committee and Its Report .....	5
<i>Members of the Committee</i> .....	6
<i>The Report</i> .....	6
Knowledge of Medical Factors .....	8
Understanding and Use of Reading and Writing Equipment .....	11
Selection and Use of Aids and Appliances .....	13
Curriculum Adaptation and Program Adjustment .....	15
Knowledge and Ability To Work With Related Resources .....	20
Competencies Evaluated by Teachers of the Blind .....	23
<i>Highlights of the Teacher Ratings</i> .....	30
<i>Comparison of Opinions of Day and Residential School Teachers</i> .....	31
<i>Comparison of Responses of Teachers With Specialized Preparation Obtained Prior to and Since January 1, 1946</i> .....	33
<i>Personal Characteristics Needed by Teachers</i> .....	33
Comparison of Opinions of Experts and Responding Teachers on Competencies Needed by Teachers of Blind Children .....	34
 OPINIONS ON THE EFFECTIVENESS OF SOME TEACHERS .....	 59
The Teachers Appraise Their Own Proficiency .....	59
Relationship Between Ratings of Importance and Ratings of Self-Competence .....	60
Ratings of Importance Greater Than Ratings of Proficiency .....	61
Ratings of Importance Less Than Ratings of Proficiency ....	63
Directors and Supervisors of Special Education Evaluate the Effectiveness of Some Recently Prepared Teachers of the Blind .....	63

	Page
PROFESSIONAL PREPARATION OF TEACHERS OF THE BLIND.....	66
Practical Experiences in Professional Preparation.....	66
<i>Student Teaching of Blind Pupils</i> .....	70
<i>Teaching Experience With Normally Seeing Pupils</i> .....	72
Professional Background for Teacher Candidates Most Likely To Succeed.....	73
SUMMARY.....	75
APPENDIX A: The Plan and Procedures Used in the Office of Education Study "Qualification and Preparation of Teachers of Exceptional Children".....	82
APPENDIX B: Information About the 100 Participating Teachers of the Blind.....	84
APPENDIX C: Information on Statistical Procedures and Results....	88
APPENDIX D: Excerpts From Inquiry Forms Used to Collect Information.....	95

## TABLES

1. Relative Importance Which 100 Teachers of Blind Children Placed on a List of Competencies.....	24
2. Comparison of the Opinions of the 100 Superior Teachers and the Committee of Experts Concerning Competencies Needed by Teachers of Blind Children.....	36
3. Rank Order Ratings of the Importance Which a Sample of Teachers of the Blind Attached to a List of Practical Experiences in Their Specialized Preparation.....	68

## GRAPHS

1. Percent of Supervisory Personnel Satisfied With the Preparation of Some Teachers of Blind Pupils.....	64
2. Amounts of Student Teaching With the Blind Needed by Those Preparing To Teach in This Area (Expressed in Medians).....	71
3. Amounts of Regular Classroom Teaching Experience Needed by Those Preparing To Teach Blind Pupils (Expressed in Medians)...	72

## FOREWORD

THIS PUBLICATION is one of a series reporting on a nationwide study *Qualification and Preparation of Teachers of Exceptional Children*, which, since its inception, has been a major project of the Office of Education. More than 2,000 persons concerned with some aspects of the education of handicapped or gifted children have participated in the project. The manner in which this project has been conducted is an example of co-operative action among persons from many agencies, organizations, school systems, and the staff of the Office of Education. Since the findings report the opinions of many leaders, they may prove useful to teachers in their own professional development, to supervisors and administrators in the selection of personnel, to standard-setting agencies, and to colleges and universities preparing teachers of exceptional children.

In this publication are reported those aspects of the broader study which deal specifically with teachers of children who are blind. Other bulletins coming from the study report on qualifications and preparation of educators instructing other exceptional children.

In the ultimate sense, since the key person in a good educational program is the teacher, this publication is intended to help foster the best possible instruction for blind boys and girls—to whom the schools and the Nation have so great an obligation.

WAYNE O. REED  
*Assistant Commissioner  
Division of State and  
Local School Systems*

J. DAN HULL  
*Director,  
Instruction, Organization and  
Services Branch*

IX



## ACKNOWLEDGMENTS

MANY PERSONS have contributed to the project which this publication reports. Deep gratitude is expressed here to all who have aided. Special appreciation goes to the National and Policy Committee members for their guidance and to the Association for the Aid of Crippled Children for cooperation throughout the project.

It is regrettable that space will not permit a personal acknowledgment of each person who has given of his time and energy—for without the aid of many persons in various parts of the United States this kind of report would not have been possible. Particular mention must be made of those who made major contributions:

The 100 successful teachers of the blind who so carefully completed extensive inquiry forms. Their responses provided a major portion of the data upon which this report was based.

Georgie Lee Abel (chairman) and other members of a committee of experts in the education of the blind who prepared a statement of the distinctive competencies needed by teachers of blind boys and girls. This group worked for a period of two years in preparing and refining their statement.

Educators in the field of the blind who assisted in developing and pretesting items contained in the inquiry form. Among them were: Angela Bourne, Robert A. Bowers, Mrs. Kathryn H. Enright, Mrs. Florence Gilmore, Florence Henderson, Mrs. Mildred B. Huffman, Mrs. Ruth D. Malillo, Ingeborg Nystrom, Mildred H. Olson, Mrs. Margaret Purchase, Edward Steidtmann, Clara Taylor, and Toshi Tekawa.

Edith Cohoe, of the Detroit Public Schools, for her assistance in the analysis of data and preparation of a working paper for conference use.

Patricia Robbins and Naomi Nehrer, of the Study Staff, who had major responsibility for collating and preparing data for publication.

Herbert S. Conrad, Director, Research and Statistical Services Branch, for the part he has played in the planning and execution of this project and for the services rendered by Mrs. Mabel Rice and other members of his staff in preparing statistical data.

X

# THE BLIND CHILD'S TEACHER:

## INTRODUCTION

THE TEACHER of blind children has a unique opportunity to enrich the lives of young people in our society who have severe visual handicaps. Much learning for sighted children takes place through visual experiences. Such visual learning opportunities are not available to blind children, and they are greatly reduced for those who have very limited residual vision.

The problems resulting from the lack of incidental visual learning experiences challenge the teacher to be sufficiently creative to bring all experiences within arm's reach or eye range of each individual child. In so doing, the teacher is privileged to be the person who introduces blind children to many new, first-hand experiences. It is the alert teacher who helps to bring the blind child's immediate environment into focus for him and who provides opportunities for learning which are real for the child who is blind. In the classroom, for example, procedures used in teaching the 3 R's involve using stylus, slates, and arithmetic boards rather than ink print books and cursive or manuscript writing.

Most regular classroom teachers would consider themselves unqualified to meet the complex needs of blind pupils. What then are the distinctive competencies needed, over and above those required to teach the sighted, to teach the blind successfully? What specialized preparation is needed? For a number of reasons the need for examination of these two questions has been recognized for some time.

In the past nearly all blind children were educated in residential schools, but today as many as one-seventh of these children are enrolled in their own community schools, either in regular or special classes. Increased enrollment has resulted in a greater demand by local school systems for qualified teachers of the blind, and a greater concern by State departments of education with certification requirements. At the same time there has been an increased demand for residential school personnel. Both of these developments have brought the question of teacher preparation and selection into sharper focus.

Not only State and local supervisory personnel, but the teacher himself and instructors in collegiate institutions have recognized the need for a re-evaluation of teacher-education programs aimed at evolving curricula which are most likely to help the teacher of the blind attain a high degree of professional competence. Educators have been increasingly concerned of late as to whether programs of instruction contain essential or non-



essential elements. Have college curricula been analyzed in relation to actual tasks to be performed by the teacher? A similar question arises concerning certification requirements. Have they been drawn up in such a discriminating way as to constitute an effective tool for selecting the best possible teachers? In this period of growth and reappraisal of special education services for blind boys and girls, these questions pointed to the need for a comprehensive study of the qualification and preparation needed by teachers of the blind.



*Courtesy, Chicago Public Schools*

**Enjoyment and Learning Through the Sense of Touch**



### *A Project Was Undertaken*

Because questions were being raised, not only in the field of the blind but in all other areas of exceptionality, the nationwide study Qualification and Preparation of Teachers of Exceptional Children<sup>1</sup> was undertaken. Included in the broad study was an examination of the distinctive competencies and experiences needed by all types of special education personnel. *Teachers of Children Who Are Blind* deals solely with those aspects of the broad project related to teachers in this area of exceptionality. Through reading the report, one may construct for himself a picture of the successful teacher of the blind, as envisioned by several groups of special educators.

Two techniques were used to gather information for this report. One was through the work of a committee of experts—the competency committee; the other was through the use of a series of inquiry forms. The committee of seven leading educators in the area of the blind prepared an extensive and thorough statement describing the specialized competencies which they believed those who teach blind pupils should possess.<sup>2</sup>

Through the series of inquiry forms information was supplied by 100 superior classroom teachers engaged in work with the blind, and by 56 State and 45 local directors and supervisors of special education who reported some responsibility in this area.<sup>3</sup>

A large part of the information reported in this publication was provided by the 100 teachers. The opinion of these special teachers was sought because they were currently in close daily association with blind children and therefore were in a position to make practical judgments about the competencies and experiences which make teachers effective. It was recognized that, throughout the Nation, there would be many more than 100 superior teachers who would be qualified to participate in this project, but it was decided by those planning the study that 100 would be a large enough sample. The names of classroom teachers were supplied by State departments of education on a quota basis.<sup>4</sup> Of the 100 teachers partici-

<sup>1</sup> The general plan of the broad study will be found in appendix A.

<sup>2</sup> More information on the competency committee and its role will be given on p. 6.

<sup>3</sup> Excerpts from these three inquiry forms containing the items upon which this report was based are reproduced in appendix D. Separate forms were sent to each group. Form EXC-4A was sent to teachers of the blind; form EXC-1 was sent to State directors and supervisors of special education; form EXC-3 was sent to local directors and supervisors of special education.

<sup>4</sup> For information about sampling procedure and the background of the 100 teachers, see appendix B.

pating in the study, 38 were teaching in day schools, and 62 in residential schools for the blind. Fifty of the group had had the major part of their specialized preparation prior to January 1, 1946, and the other fifty after that date. They were working in 25 States and the District of Columbia.

### *What This Publication Contains*

The publication *Teachers of Children Who are Blind* specifically includes: (1) a committee report on competencies needed by teachers of children who are blind; (2) a report of an evaluation of a list of competencies by the 100 superior teachers of the blind; (3) a comparison of competencies described by committee members and those rated by the 100 classroom teachers of the blind; (4) an appraisal of the effectiveness of some in-service teachers of the blind; (5) an evaluation of professional experiences needed by teachers of the blind; and (6) a summary statement of findings and some implications for planning and additional research.



# COMPETENCIES NEEDED BY TEACHERS OF BLIND CHILDREN

AT THE CORE of the movement to secure qualified teachers of the blind is the need for increased understanding of the distinctive competencies required by these educators. Opinions about these unique skills and knowledges which were collected through two distinct and separate procedures are reported in this section. First, the reader will find the competency committee's statement which identifies and describes the knowledge and abilities thought to be essential to well-qualified teachers. Next is a report of the relative importance for their own teaching success which the 100 teachers placed on a list of specialized competencies. This is followed by a comparison of data gathered by these two independent procedures.

## THE COMPETENCY COMMITTEE AND ITS REPORT

In defining the distinctive competencies needed by teachers of blind children, the committee's task was a creative one. It was suggested that the members of the committee should set their sights high and write their statement in terms of the ideal. Thus, their report would serve as a goal toward which to work rather than merely as a basis for minimum standards. They were to do their work without reference to existing standards, college curricula, or reports of other educators. They did not have access to inquiry forms used to collect data in this study. The committee was regarded as autonomous in making its statement, and although the report was reviewed by many people, changes in it were made only by committee action.

Nominations to the competency committee were made by the national advisory committee.<sup>1</sup> Insofar as possible, committee members were selected on the basis of: (1) Teaching experience with blind children; (2) supervisory or administrative responsibility for educational programs for the blind; and (3) experience in the preparation of teachers of the blind through appointments to the staff of a college or university. On the basis of these guidelines a committee of seven recognized leaders in the education of the blind was formed.

The validity of their statement rests largely on the fact that the committee members were outstanding educators in their field. Their report which represents deliberation by the group over a period of 2 years, prefaced by a brief statement of philosophy and goals in educating the blind, is reproduced in its entirety in the following pages.

<sup>1</sup> See Appendix A for information on how the committee was formed.



TEACHERS OF CHILDREN WHO ARE BLIND  
MEMBERS OF THE COMMITTEE<sup>2</sup>

GEORGIE LEE ABEL, *Chairman*

IONE BIGGS

FLORENCE HENDERSON

PAULINE POWERS

GERALDINE SCHOLL

EDWARD J. WATERHOUSE

EVERETT E. WILCOX

THE REPORT

The teacher of blind children should possess the same competencies expected of teachers of all children. He should, however, possess some of the knowledge, skills, and understandings, to a greater degree. In addition to the preparation in general education, this teacher should acquire certain competencies basic to the education of blind children. These will vary in degree and kind depending upon the type of position the teacher holds, the age group of children he teaches, the type of school in which he functions, the administrative structure, and the community resources available. Certain information and procedures from related areas of special education are also important to the teacher in meeting the varying needs of blind children with additional handicaps.

The teacher of blind children should be prepared to develop a program which is oriented to children who function as *blind individuals*. Too, they should be able to use effectively the aids and appliances, the methods of procedure, and the related resources appropriate to this area of special education. This presupposes that the teacher has a thorough understanding of the social, psychological, emotional, and medical implications of blindness, as they may affect the complete adjustment and happiness of these children. This knowledge further demands that the teacher accept the challenge of creating an individualized and an enriched program which brings experience close to the child and interprets the physical environment when necessary for his best interest. The goal for the blind child is, as for all children, the growth and development of the whole child and the realization of a healthy personality which will help him to become an independent well-adjusted adult. In order to achieve these goals, the teacher should have physical and mental health of the highest quality. While versatility, flexibility, ingenuity,

<sup>2</sup> See page v for titles and addresses of committee members.



*Courtesy, Chicago Public Schools.*

### **Teaching Blind Pupils to Read Braille Is a Necessary Teacher Competence**

imagination, and complete acceptance of the child are qualities necessary for teachers of all children, the teacher of the child who is blind should possess them to a greater degree. The blind child should be allowed to develop according to his own individual pattern, and should be permitted to share experiences which are real for him with an understanding teacher. This approach requires the teacher's interest in and knowledge of the child's family, friends, and community.

It is necessary that the teacher of blind children be able to evaluate current trends in general education in relation to the needs of blind children, in order to make necessary adaptations in curriculum aids and program. He should not strive to become an expert in all types of service to children, but to make use of the most suitable resources important in the complete development of a program for blind children. This necessitates his ability to work as a member of a team, using the best services available from pertinent educational and social organizations as well as community resources.



Perhaps the most significant factor in the successful functioning of the teacher of blind children is his attitude toward blindness. He should understand his feelings about the individual needs and problems arising from blindness. He should further recognize the impact of the attitudes of society as a basic handicapping factor relating to blindness itself. As an indication of his understanding of and belief in blind persons, he should avoid either over identification with them or over simplification of their problems.

The teacher who has achieved this balance in his feeling about blindness will be personally acceptable to both blind and sighted individuals and certainly should be able to establish rapport with both groups without variation in his reactions or attitudes toward either.

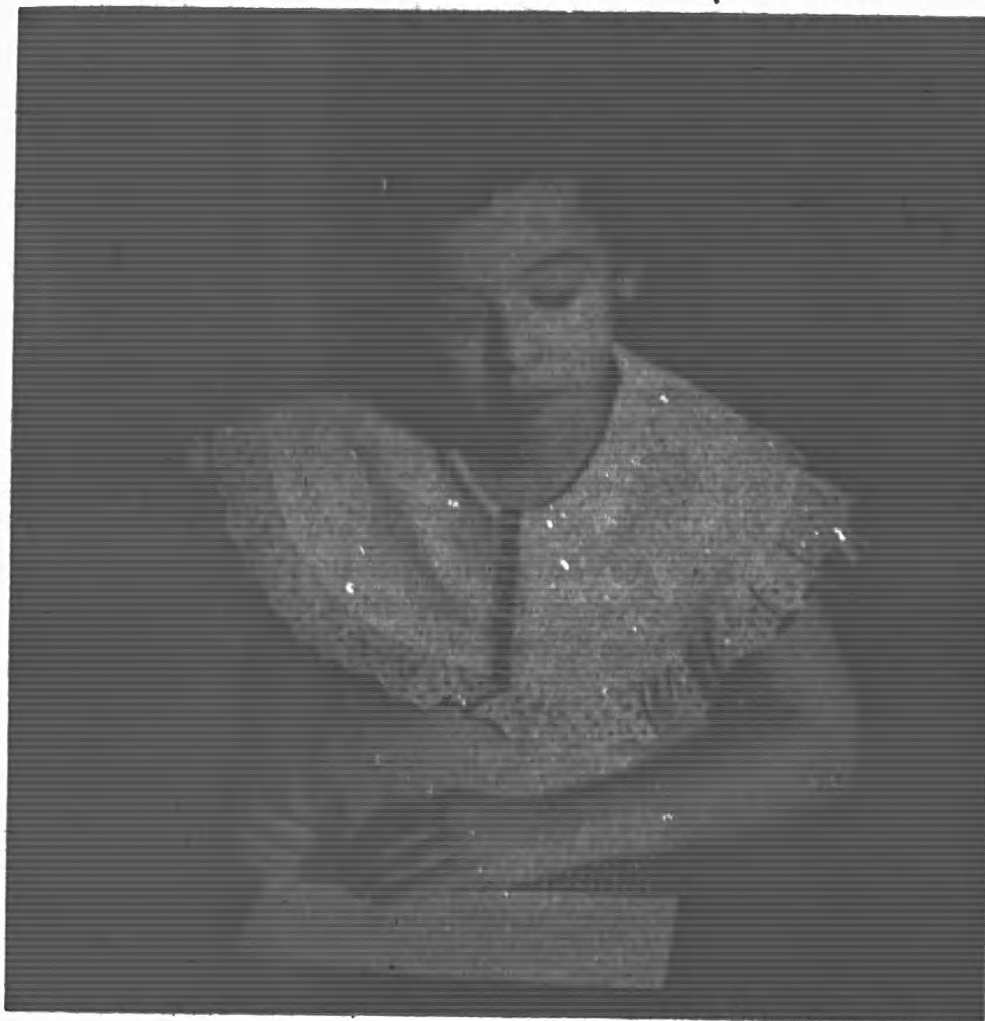
The teacher of blind children should be especially skillful in his ability to observe these children as they function as individuals and participate in group situations. He should recognize that these children will continue to live and grow in a society which is largely geared to individuals who see. He should therefore help each child to seek and achieve integration with his sighted friends and relatives and to accept the responsibilities of citizenship. He should be able to help instill in the blind child the desire to become identified with a group and to develop a sense of belonging and contributing. This teacher should also assume responsibility for constructive guidance when the child is attempting to understand his own handicap and to interpret his problems to others who desire to help him.

Finally, the teacher of blind children should be able to interpret courageously the needs and abilities of blind children to society and to assist these children in realizing their desire to become functioning and worthwhile blind adults.

### *Knowledge of Medical Factors*

The teacher of blind children should possess information on eye defects and their causes and should also be aware of their social and possible psychological implications, so that he is competent to use this information, as a layman, to the best interest of the blind child and his parents.





*Courtesy, Detroit Public Schools*

### **Teacher Competence Contributed to this Pupil's Braille Writing Skills**

While it is not the primary function of the teacher to deal with the ophthalmological conditions, it is important that he have a knowledge of the effect of the loss of sight in relation to certain factors, examples of which are the following:

Age at onset.

Type of onset, traumatic or over a period of time.

Etiology.

Congenital, hereditary, or acquired.

Disease affecting only the eye, such as cataract, or disease complicating entire physical structure, such as diabetes.

History of periods of hospitalization.

**It is also important for the teacher to have:**

Knowledge of the current screening devices in vision and, where necessary, facility in using them to indicate the visual efficiency of the child. Skill in

observation of the performance of the child in relation to the day-to-day planning of his work and for the purpose of detecting significant changes that may have occurred in order to refer him to medical attention.

An understanding of the possible implication of the various causes of blindness.

Ability to cooperate efficiently with a team of professional workers such as the ophthalmologist, pediatrician, nurse, and social worker, in the best interest of the child and his family. This may require a knowledge of the existing facilities to which the parents might turn to receive such medical services as treatment, surgery, provision for glasses, should the parents not be able to afford these costly services.

Skill in recognizing certain physical conditions which may affect the academic achievement and the social and personality development of the child. Examples may be certain restrictive behavior conditions or convalescent or special treatment periods.

The teacher should be able to talk over with the parents in a comfortable manner the possible effects of the eye condition on the educational achievement, the personality development, and to some extent the future occupational plans of their child. The teacher should realize his own limitations in the medical field, but should accept responsibility as a layman in the medical profession. In his association with parents, he should have the ability to interpret the ophthalmological records or eye reports so that the behavior of the child can be explained in the light of an understanding of the eye condition. Such understanding will help the teacher and the parent to aid the child in realizing his best potential.

Through systematic observation of the behavior of the child in classroom situations the teacher should attempt to develop skill in determining the visual efficiency of each child as he functions in his school program. Through careful guidance, the teacher should help him to realize the potential of his residual vision, to accept his limitations realistically, and to make adaptations himself which will make him a more effective member of society.

The teacher should be able to adjust the program to various problems which may arise with *partially blind children*. They have very limited vision but may use it in varying degrees in their educational program. For example, the children described in the following paragraphs may require program adjustment:

Children with limited residual vision which they may use in social situations but not to much advantage in the use of printed materials in the educational program.

Children with borderline vision (roughly 20/200) who may operate either as sighted children using small or large print materials, or as blind children using braille and comparable materials.



Children with borderline vision for whom it may be necessary to plan a gradual shift in the program, from the educational medium of braille to print material or the reverse.

Children with borderline vision for whom it is especially important to be able to determine the correct educational medium at a given time taking into consideration the visual, psychological, and emotional needs.

Children for whom improved vision, resulting from surgery or treatment, makes it necessary for them to be introduced to vision as a new avenue to learning.

Children whose performance in educational tasks indicates better vision than the medical records might suggest and also children whose medical records indicate much better vision than they are using.

It is important that curriculum, methods of instruction, and environment be adapted to the individual needs of the several eye conditions found in school children. While there are many conditions which require special adaptation, the following serve as examples:

The child with congenital cataract may profit by control of light, in accordance with the recommendations of the ophthalmologist.

The child with photophobia who needs to recognize his tolerance to light and continuous eye tasks may require special lighting.

The child with progressive myopia may require an enriched program of activities with possible restrictions which may be prescribed by the physician.

The educational plan for the child should be based upon the total organism, which presupposes a total physical and mental health program; since the eye is but a part of the organism and reflects the total health picture. It should be obvious that the general health of all blind children is of prime concern to the teacher, not only in regard to eye care but in regard to the total physical capacity.

The teacher should recognize that the blind pupil experiences emotional tension and physical strain as he enlarges his environment and meets new situations. The teacher should be able to help the child, his family, and his friends to anticipate and accept this strain. The teacher has a special obligation to the *newly blinded child* who may experience even greater emotional strain. This challenges the teacher to great understanding of the implications of blindness as they are faced by this newly-blinded child and his family.

### *Understanding and Use of Reading and Writing Equipment*

The teacher responsible for the education of blind children should be able to demonstrate the use of all of the tools of reading

and writing and should understand the importance of each to the efficiency of the blind child. He should recognize that the braille system provides the best source of reference for the blind person and that it is still the only means of writing that furnishes the blind child with a permanent record. This medium, therefore, is basic to his learning process and education. The teacher will understand that the use of the pencil is important to the blind individual both as a means of communication between himself and others and as an independent skill which he must show in legal and social situations. He will know also that the typewriter furnishes the most legible method of communication and provides an opportunity for speed and facility in the educational program and also in business and social correspondence. The teacher should achieve:

Facility in reading and writing braille and an appreciation of this medium in education.

Knowledge of the mechanics of transcribing braille material for each learning level in order to be able to develop worksheets and individual lesson material for the children.

An awareness of the available material already in braille suitable to the specific needs of the blind child, and skill in adapting material to meet the individual needs, using avenues of learning which are real to the child.

Ability to impart to the student the appreciation of braille reading as a thought-getting process and as a means of extending his experience and enlarging his horizons.

Ability to recognize individual readiness (physical, emotional, and social) of each child to use braille.

Recognition of the fact that reading and writing braille require separate types of mechanical skills and that fluency in reading may be hindered by the analysis required in writing braille.

Effective teaching of writing skills requires such competencies as:

Recognition of the point at which the child has sufficient skills in reading to enable him to learn to write braille without hindering his reading.

Recognition of readiness in relation to the child's muscular coordination and spatial orientation.

Knowledge of the equipment and materials in the field available for writing and the ability to choose that which is best suited for the individual.

Recognition of the importance of pencil and pen writing and skill in developing a desire in the child for this type of writing.

Ability to provide for blind children an opportunity to learn to write with pencil as soon as they are ready for this experience, and as soon as other teachers are able to cooperate with this type of program. Likewise, responsibility for the provision for instruction in typing or for the referral of this type of instruction to the proper person as soon as the child is ready to master



this important means of communication. It is important to develop in blind children skill in the use and care of this equipment.

An understanding and evaluation of the various published courses in braille reading and writing as well as the special types of equipment.

Knowledge of the various braille codes such as music, mathematics, and foreign languages.

Recognition of the space required for the housing of reading and writing equipment and an understanding of the importance of placing this equipment where it is easily accessible to the blind child. In planning the use of equipment and in making program adjustments, the physical energy of the blind child should be conserved; at the same time, consideration should be given to efficient working habits.

### *Selection and Use of Aids and Appliances*

The teacher of blind children should be unusually resourceful in the selection and use of equipment which may be adaptable to the education of blind children. He should be equally cog-



*Courtesy, Chicago Public Schools*

**This Boy Has Learned To Use His Arithmetic Slate**

nizant of the importance of testing equipment with blind children and evaluating the results for the possibility of wider use.

The teacher should be aware of the special equipment which is available through specialized agencies and schools and should know how to secure it; he should be able to justify the expense in terms of its use. A knowledge of the specialized aids and appliances and, where possible, a firsthand examination of them can be of great value to the teacher. Examples of the specialized equipment which should be available to the classroom include all of the braille writing equipment, arithmetic aids, adaptations of geographic and other scientific aids, adaptations of recreational facilities and games, devices to aid in efficient living such as the various guidance devices for physical orientation.<sup>3</sup> Some of these will become a definite part of the equipment in a classroom, while others will be used as information in the files of the teacher.

Because blind children gain so much from intelligent listening, certain audiovisual aids provide good curriculum assistance. The teacher should be able to develop "learning-by-listening" skills and to teach the child to use this equipment effectively and to care for it.

Certain blind children have useful residual vision which is important in forming and developing concepts in the educational process. For this reason, it is significant that the teacher understand the use of visual aids, including those found in the regular market and those especially designed for the use of children with limited vision. Examples of these are certain magnifiers and films. The teacher should consider the current trends in the use of magnifiers and their intelligent application with blind children who may profit from their use. It is important that the value of these aids be determined more by the reactions of the children who use them than by the attitudes of the teacher.

The teacher should be aware of the various modes of travel and of the philosophy concerning each, that is, the guide dog or the cane technique. The good teacher recognizes that all aids and appliances are important only as they are used in the best interest of the child. This means that these devices should help him function more effectively in social situations or gain for him more realistic knowledge of his total environment.

<sup>3</sup> See catalogs of American Printing House for the Blind, 1630 Frankfort Avenue, Louisville, Ky., and G. L. Abel, *Resources for Teachers of Blind and Sighted Children*, New York: American Foundation for the Blind, 1934, p. 65. See also *Aids and Appliances Catalog*, New York, American Foundation for the Blind, published annually.



*Curriculum Adaptation and Program Adjustment*

Every teacher contributing to the educational program for blind children will recognize his need for competency in developing a functional curriculum in the part of the program for which he is responsible. He will also understand and appreciate the place of all members of the team of coworkers in his school who are working toward the ultimate goals desirable for each child in his educational program.

Each teacher in his own position should have the ability to develop a curriculum in all of the areas on the basis of the potential which the blind child has, recognizing his problems but not permitting the lack of vision to prejudice his attitude toward the child's growth and development. The teacher can make use of the child's remaining senses, considering the information on personality, motivation, and other psychological factors which the related disciplines contribute to education. This procedure makes it imperative that each blind child be considered as an individual with variations within himself in both physical and mental characteristics as well as variations in personality structure.

As in all phases of the educational program, curricular procedures evolve because of intelligent use and interpretation of objective measurements applicable to blind children. This constructive planning should also reflect knowledge gained from the most pertinent research in all assessment techniques used.

As the teacher attempts to interpret all of the curriculum areas in a program for blind children, he recognizes that his voice should be especially pleasing, both in diction and in intonation, and should inspire confidence and a sense of security in blind children.

The teacher of blind children can gain skill in evaluating the concepts of the children after certain projects have been developed. He can improve this technique by practicing the art of learning from blind children their own feelings and reactions toward their experiences.

In a constructive program which embraces the communication skills, the teacher working in this area should be able to invite the blind child to share in connected and creative thoughts the actual events which are a part of the project basic to the broad curriculum plan. Through oral communication, the teacher should learn from the blind child his concepts and language facility and stimulate him to acquire the listening skills which are vital to his learning process.

Even more than the teacher of sighted children, this teacher should be alert to the blind child's readiness for reading. He should learn that the blind child is deprived of the visual stimulation which provides the incidental learning in the early years. He should continue to be conscious of this fact. The teacher should have the ability to fill this need and provide for well-structured situations which will relate the child to his environment. As soon as the child has demonstrated his ability to share experiences and has expressed curiosity about his physical environment, the teacher is ready to consider the basic factors in the development of a braille reading program. This demands the ability to determine the child's physical orientation, spatial perception, and muscular coordination as well as other factors basic to good reading.

The teacher should also know the child's physical capacity. Because the physical hand movements and body position in reading and writing braille can become tiresome, the teacher should be aware of the fatigue element and possible tension. He should also recognize the value of constructive variation of activities of the program and the importance of good posture and relaxed reading position.

The teacher, recognizing the child's intellectual curiosity, should be able to help him grow through initial braille reading experiences, so that he may be introduced to purposeful writing. This should be done at a time when it will not interfere with fluent reading.

Because braille writing requires additional muscular coordination and strength, the teacher should develop this program in an atmosphere of support and security; braille and slate writing demand more physical labor of a blind child than manual writing requires of a sighted child. Because of the problems involved in writing with the slate, such as the reversed position of the dots and strenuous small-muscle activity involved, it is important that the teacher seriously consider the use of the braille writer for beginners—even though this involves additional expense. When it becomes apparent that a child can acquire a more functional use of braille through the braille slate, the teacher should be able to help the child learn to use the slate.

The teacher whose position demands that he develop the program for young blind children in the elementary school should further be able to determine the blind child's readiness for increased and more complicated number experiences. These experiences and number concepts should be introduced and



evaluated in terms of what the child already knows and be related to a physical environment which he understands. The teacher should be competent to judge for each individual child the importance of introducing number manipulation, only after the child has had sufficient experience with numbers. The teacher should be able to recognize the value of the various specially adapted mathematical aids only as a means to an end for each individual child. He should be ingenious in suggesting ways of manipulating numbers with minimum effort in the utilization of mechanical equipment, emphasizing mental arithmetic but realizing the limitations of each individual. Particularly with the blind child, the teacher should be able to evaluate genuine progress in and understanding of arithmetic.

Certain other subjects which usually include laboratory work require great imagination and resourcefulness on the part of the teacher. These include such subjects as physics and biology and home economics subjects such as foods, child care, and clothing.

The teacher should possess the same ingenuity in making sure that the blind child has access to effective total programs in physical education, home economics, vocational education, and creative arts, including music. The wise teacher will spend the necessary amount of time in initiating, developing, and evaluating each unit in laboratory type subjects to make sure that the blind children are not carried along solely by the enthusiasm of the teacher or perhaps the other children with varying degrees of vision.

Throughout the school program, the growth and development in social competency of the blind child must be a prime consideration to the alert teacher. These children are likely to find it more difficult to react effectively to new social situations in strange physical environments. The teacher should be able to help the child develop skill in social contacts and to interpret to him the obvious reasons for his possible difficulty. Understanding and resourcefulness of the teacher will not only aid the blind child in relationships with his family and peer group but will also help him to achieve a feeling of integration in his contacts with sighted friends in the community.

The blind child's physical orientation and ability to travel are basic to his independence, as well as to the respect which this competency inspires in others. Every teacher, recognizing the blind child's need for continued help in developing skills in physical orientation at each level of his growth, should also recognize that the child will need further instruction in this skill.



*Courtesy, Chicago Public Schools*

#### **First-hand Experiences Are Made Meaningful to These Blind Boys**

The teacher should, therefore, be aware of the available facilities for training.

The teacher should consider the varying degrees of ability of blind children in the interpretation of their physical environment, spatial orientation, and general physical mobility. With this in mind, he should plan for activities to be carried on in an atmosphere of freedom and exploration which will continue to improve the skills basic to the children's physical orientation and travel. In this important area the curriculum variation implies that the teacher should have skill in selecting suitable points of interest for field trips and other activity. Even greater skill is necessary in planning in order to bring the experience into focus for the blind child.

The social studies curriculum is rich in opportunities to bring citizenship experiences to the blind child with emphasis on his privilege as a citizen and his responsibilities to others. Independence and self-respect are goals of the blind child, as they are



of all children. In a culture in which people are willing to serve or help the blind individual, the teacher should be especially skillful in developing the child's awareness of this *in order to offset the child's possible tendency to receive too much help.*

The overall program at *all* grade levels demands serious consideration of efficient living skills by every teacher. This places an obligation on the teacher to believe that a blind child is capable of eating according to the most acceptable practice, of grooming himself in the most effective and becoming style, and of functioning as an individual with the greatest amount of ease for *him* and with the least amount of assistance from his sighted friends and relatives. It also implies the importance of his developing recreational skills which are basic to his happiness in normal functional living. It further means that when it is necessary and advisable for the blind child to request help, he accept it gracefully, and when he does not need it to refuse it just as gracefully.

No teacher has direct responsibility for teaching all of the efficient living skills, but all teachers can inspire them, detect their lack, and request that means of acquiring them be made available to blind children through the appropriate resources. It is important that teachers observe the children as they participate in informal individual and group situations and evaluate them in terms of the individual child. The skill of systematic observation and followup, with frank and honest discussions with the child about his behavior in a given situation, can be one of the major differences between the teacher who knows and understands these children and the one who has very slight contact with them.

As is pointed out in other sections of this report, the skill and understanding necessary in the teacher's answering (or providing for) important personal and social developmental needs of the pupil vary in kind and degree according to the position which he holds and the type of school in which he functions. The neglect of this important development, however, will be the greatest loss to the blind child who cannot learn many of these social activities through visual observation. The skillful teacher should know that lack of efficient living skills often causes society to react toward blind persons in an attitude of pity rather than respect. The understanding and appreciation of the total program demand that all the teachers see the integration of the various subject-matter areas in the light of the growth and development needs of each child.

The cultural life of the blind child is important. The teacher can observe the child's concepts of objects in his environment and explore his possible aptitudes in expressing these concepts in a program rich in creative opportunity through sculpture and other media. The teacher should be able to offer the child carefully selected examples of all types of art which have meaning for him. The ability to inspire creative arts in the blind child and to experiment with various media where work seems promising can be of great value to the teacher in his understanding of the child.

In the fine arts, music has long been recognized as an area important in the education of blind children. The good teacher will be anxious for these children to have an opportunity to participate in music activities and to learn to appreciate all types of music. He will know that where sufficient ability is shown, certain children should be provided with the opportunity to study music according to their individual potentialities. Like all other abilities, ability in this particular area should not be stressed to the point where it might interfere with the best possible total program for each blind child.

Each teacher, regardless of his contribution to the life of the blind child at any school age, should be able to view the objectives of his program in relation to the future rehabilitation service for the child and also in the light of the desired public acceptance which a reasonably well-adjusted blind person should be able to expect from society. He should have a genuine belief in the program, a knowledge of how to develop it in terms of the child, and a willingness to interpret this program through his own acceptance of blind individuals as *people* who are blind.

### *Knowledge and Ability To Work with Related Resources*

Related resources can become a vital part of the total program for the education of blind children, if the teacher understands the importance of their use. Through correct evaluation of a resource, the teacher should be able to use those services which effectively meet his pupils' needs.

The most important resource in the education of the blind child at all age levels is his family, whose cooperation is basic to the planning of activities both in school and at home. Of almost equal importance is the community in which he and his family reside.

Ability to call on appropriate services and skill in handling them is a part of the teacher's ability to help blind children with



problems related to the educational program. The skillful teacher recognizes his direct professional responsibility to the children just as strongly as he understands the importance of wise referral of problems which can be better worked out elsewhere.

To be effective, the teacher should be familiar with the local, State, and national resources for all children as well as with the specialized agencies serving the blind at all age levels. His understanding should include a knowledge of such services as child guidance clinics; psychological, social, and medical services; and civic and religious organizations. In order to help with problems in the family which may be exaggerated because of the child's blindness, the teacher should know of the services available through child welfare, family service, maternal and child care agencies, and other similar public and private organizations. He should also be able, when necessary, to interpret the needs of blind individuals to these agencies. Through wise use of the appropriate resources, general agencies improve their skill in serving these children, and specialized agencies gain in their evaluation of their existing services and learn more about the work which all agencies can do for blind persons.



*Courtesy, International Council for Exceptional Children*

**Sighted and Blind Pupils Share the World of Books**

It is important that the teacher of blind children understand the valuable service offered by State and local organizations serving other groups of handicapped children. This type of information, kept in an easily accessible file, can help the teacher solve problems of blind children with multiple handicaps. It also affords him an opportunity for improving his skill in one area of special education through the findings of experts in related fields. Of special consideration might be the national groups offering services in other areas of the physically and mentally handicapped, such as organizations in occupational and physical therapy, those in mental hygiene which consider problems of mentally retarded, emotionally disturbed, and gifted children, as well as those serving children with impaired hearing.

Such national organizations as the following should be particularly well known to the teacher of blind children:

- American Association of Instructors of the Blind.
- American Association of Workers for the Blind.
- American Foundation for the Blind, Inc.
- American Printing House for the Blind.
- Association for the Aid of Crippled Children.
- International Council for Exceptional Children.
- National Rehabilitation Association.
- National Society for Crippled Children and Adults, Inc.
- National Society for the Prevention of Blindness, Inc.
- United Cerebral Palsy Associations, Inc.

The teacher's knowledge and use of these organizations, in addition to his familiarity with the most appropriate general education organizations, will depend upon the area of service and the type of school in which he functions.

It is perhaps of greatest importance to blind children that the teacher select with care the professional organization in general education in which he can participate most effectively. Such participation will aid him in evaluating trends and making logical curriculum adaptations and in interpreting the needs of blind persons to general educators. It might also serve as an excellent opportunity to acquaint good teachers in general education with the possibilities of service in this specialized area of education.

To aid in vocational guidance and future placement of blind children, in addition to a close working relationship with local rehabilitation organizations, the teacher should have access to a file of general State, local, and national organizations responsible for guidance and vocational information. The use of all these organizations, through their publications and speakers and through participation of the children and the teachers in their



services, contributes to integration into society of the school children who will become the future adults. Examples of such organizations are:

Office of Education, United States Department of Health, Education, and Welfare.

Children's Bureau, United States Department of Health, Education, and Welfare.

National Association of Student Councils of the National Association of Secondary School Principals.

National Vocational Guidance Association of the American Personnel and Guidance Association.

Corresponding organizations at State and local levels.

As in all intelligent planning by the competent teacher, the selection of any related resource will be of value only as it contributes to the ultimate individual goals desirable for each child.

[End of Committee Report]

## COMPETENCIES EVALUATED BY TEACHERS OF THE BLIND

The statement of the competency committee has just been presented. Opinions about competencies were also secured from 100 superior teachers of the blind, whose contribution to the study was different from that of the committee; they rated the relative importance of a finite list of specialized knowledges and abilities.<sup>3</sup> This relatively comprehensive list had been developed by the study staff with the help of a number of specialists and teachers who reviewed and pretested the items.

The list was submitted to teachers<sup>4</sup> who were asked to answer the following question: "In your present position as a teacher of blind children, how important is it that you possess the following competencies?" Teachers answered on a four-point scale of "very important," "important," "less important," and "not important." All of the competencies in the list appear in table 1 on page 24<sup>5</sup> arranged in rank order according to the average relative importance placed on them by the 100 teachers of the blind.

<sup>3</sup> See appendix D (form EXC-4A); Question No. 2.

<sup>4</sup> The reader may wish to refer again to the method of selection of the participating teachers and their background, as outlined in appendix B. This will serve as a "frame of reference" for interpreting the opinions expressed by them.

<sup>5</sup> Table 1 also contains other information concerning self-competence ratings which will be discussed on pp. 59 to 63.

Table 1.—Relative Importance Which 100 Teachers of Blind Children Placed on a List of Competencies

Rank order <sup>1</sup> of importance and item number	Knowledges and abilities	Rank order <sup>1</sup> of self- appraisal of proficiency
Items rated VERY IMPORTANT—(1-30)		
1	The ability— to help blind children develop acceptable patterns of personal hygiene and behavior.	3.
2	to recognize individual differences in each blind child and to make provisions for them.	1.
3 ag <sup>1</sup>	A knowledge or understanding of— the significance of the possible effect of the socio-economic conditions and emotional climate of the home on the blind child's social, emotional, and intellectual development.	15.
4	The ability— to create a classroom atmosphere that is conducive to good mental health.	4.
5	to help blind children with respect to their personal attitudes toward their physical handicap.	11.
6 ag	A knowledge or understanding of— the medical, emotional, psychological, social, and educational implications of blindness.	25.
7	The ability— to help blind children use the senses of touch and hearing in analyzing a situation.	2.
8	to recognize possible causes of social and emotional maladjustment of blind children and to participate in planning courses of action aimed at alleviating them.	17.
9 <sup>a</sup>	The ability— to encourage and create situations in school in which blind children have an opportunity to associate naturally and freely with children of normal vision.	14.
10	A knowledge or understanding of— the significance of amount of usable vision.	6.
11	The ability— to enunciate clearly and pronounce correctly in a pleasing voice.	7.
12	A knowledge or understanding of— the importance of initiating all experiences in the program within the arm's reach of each blind child, and being ready to interpret that which he cannot reach.	13.
13	The ability— to recognize symptoms that suggest the need for referral to medical personnel.	16.

See footnotes at end of table.



Table 1—Continued

Rank order <sup>1</sup> of importance and item number	Knowledges and abilities	Rank order <sup>1</sup> of self- appraisal of proficiency
Items rated VERY IMPORTANT—(1-30)—Continued		
14	A knowledge or understanding of—	
15 sg	factors related to readiness for braille reading and writing.	23.
	methods and techniques of teaching the socially and emotionally disturbed child.	48.
	The ability—	
16	to help blind children with respect to their social problems	22.
17*	to help parents with their child's limitations and potentialities.	19.
18	to organize and plan field trips for blind children which bring as many objects as possible within their arm's reach.	34.
19*	to develop the blind child's skill in using special aids and appliances which will help him to operate more efficiently, such as talking books, special educational models, barometers, rulers, and braille writers.	10.
	A knowledge or understanding of—	
20	the most efficient use of hearing and vision with the least amount of fatigue for blind children.	38.
	The ability—	
21	to teach braille (when necessary)	9.
	to provide blind pupils with opportunities in the curriculum for experiences in—	
22	health education	26.
23 sg	physical education (skill in orientation and travel including recreational activities).	58.
24*	to cooperate with other special teachers and regular school personnel in developing an integrated educational program for each blind child.	8.
25*	to help blind children with respect to their educational problems and the relationship of the educational program to future placement.	42.
	A knowledge or understanding of—	
26	types, sources of procurement, and uses of special equipment and materials for writing braille.	5.
27	methods and techniques of teaching the normal child	18.
	The ability—	
28	to coordinate the learning process around socially meaningful central themes.	21.
	A knowledge or understanding of—	
29	the significance of age at onset of blindness	12.
	The ability—	
30 sg	to help blind children with respect to their vocational problems and life goals.	54.

See footnotes at end of table.

Table 1—Continued

Rank order <sup>1</sup> of importance and item number	Knowledges and abilities	Rank order <sup>2</sup> of self- appraisal of proficiency
Items rated VERY IMPORTANT—(1-30)—Continued		
	The ability—	
31.....	to interpret special educational programs for, and the problems and abilities of, the blind to the general public.	24.
32.....	to work as a member of a team with other professional workers, such as medical and psychological personnel, in making a case study of a blind child aimed at planning a program suited to his needs and abilities.	39.
33.....	to make educational interpretations from psychological reports.	37.
34.....	A knowledge or understanding of— methods and techniques of teaching the partially seeing child.	32.
Items rated IMPORTANT—(31-78)		
	The ability—	
35 sg.....	to provide blind pupils with opportunities in the curriculum for experiences in music.	66.
36*.....	to interpret special education programs for and the problems and abilities of the blind to regular school personnel.	30.
	A knowledge or understanding of—	
37*.....	existing facilities to which parents may turn to receive medical services, glasses, and so on for their blind child, should they be unable to afford them.	46.
	The ability—	
38*.....	to write braille with ease.....	20 sg. <sup>4</sup>
39.....	to make educational interpretations from reports of social workers.	27.
	A knowledge or understanding of—	
40.....	the general meaning of the diagnosis and prognosis of the visual condition for each blind pupil.	51.
	The ability—	
41*.....	to help parents with school placement.....	33.
	The ability—	
42*.....	to make educational interpretations from ophthalmological and other medical reports.	59.
43 sg*.....	to teach touch typing (when necessary).....	64.
44.....	to keep and use individual, cumulative records of blind children.	28 sg.

See footnotes at end of table.



Table 1—Continued

Rank order <sup>1</sup> of importance and item number	Knowledges and abilities	Rank order <sup>1</sup> of self- appraisal of proficiency
Items rated VERY IMPORTANT—(31-78)—Continued		
45.....	A knowledge or understanding of— the purposes, services, and locations of national organizations concerned with the education or general welfare of the blind, such as the International Council for Exceptional Children, American Foundation for the Blind, and the American Association of Instructors of the Blind.	31 sg.
46*.....	the location of, and the services offered by, various non-school local organizations (such as clinics, health departments, and vocational rehabilitation agencies) for blind children and their parents.	49.
47 sg.....	The ability— to provide blind pupils with opportunities in the curriculum for experiences in arts and crafts.	70.
48*.....	to interpret to administrators and supervisors the importance of careful selection of personnel, justification of expensive equipment, and organizational procedures for the education of blind pupils.	47.
49.....	A knowledge or understanding of— reference materials and professional literature and journals on the education and psychology of the blind.	29 sg.
50.....	methods and techniques of teaching the mentally retarded child.	61.
51.....	The ability— to provide blind pupils with opportunities in the curriculum for experiences in dramatic arts.	50.
52*.....	to participate in parent-school activities.....	41 sg.
53*.....	A knowledge or understanding of— the findings of research studies which have bearing on the education, psychology, and social status of the blind.	53.
54 sg.....	The ability— to provide blind pupils with opportunities in the curriculum for experiences in domestic arts.	78.
55.....	A knowledge or understanding of— hygiene of the eye.....	45.
56*.....	The ability— to develop and prepare work sheets and experience stories in braille.	43.

See footnotes at end of table.

Table 1—Continued

Rank order <sup>1</sup> of importance and item number	Knowledges and abilities	Rank order <sup>1</sup> of self- appraisal of proficiency
Items rated VERY IMPORTANT—(31-78)—Continued		
57.....	to understand curriculum and its adaptation at both the elementary and the secondary levels well enough to teach blind children at more than one level when necessary.	40 sg.
58*.....	to operate and use amplifiers, record players, and other audio aids.	44.
59*.....	A knowledge or understanding of— educational provisions for blind children under existing Federal, State, and local laws and regulations.	55.
60.....	The ability— to provide blind pupils with opportunities in the curriculum and experiences in fine arts.	67.
61*.....	to contribute to community leadership in establishing an educational program for blind children.	62.
62.....	A knowledge or understanding of— causes of the various conditions which result in blindness or loss of vision.	52.
63 sg.....	The ability— to help parents with occupational placement.	75.
64.....	A knowledge or understanding of— methods and techniques of teaching the gifted child.	63.
65*.....	The ability— to interpret special educational programs for, and the problems and abilities of, the blind to nonprofessional school workers, such as bus attendants and school custodians.	35 sg.
66 sg.....	to administer to blind children aptitude tests.	76.
67.....	to teach writing and the use of the pen or pencil (when necessary).	56.
68 sg.....	to administer to blind children individual tests of mental ability.	80.
69 sg.....	to administer to blind children informal tests of hearing efficiency.	74.
70*.....	to touch type.	57 sg.
71 sg.....	to provide blind pupils with opportunities in the curriculum for experiences in industrial arts.	82.
72.....	to administer to blind children informal tests of visual acuity.	72.
73*.....	A knowledge or understanding of— current theories and controversies concerning causes, prevention, and treatment of blindness and diseases of the eye.	65.
74.....	The ability— to administer to blind children group achievement tests.	68.

See footnotes at end of table.



Table 1—Continued

Rank order <sup>1</sup> of importance and item number	Knowledges and abilities	Rank order <sup>1</sup> of self- appraisal of proficiency
Items rated IMPORTANT—(31-78)—Continued		
75.....	A knowledge or understanding of— the anatomy and physiology of the eye.....	60 sg.
76.....	The ability— to work with architects and school administrators in plan- ning and securing classroom and other special school equipment and storage facilities for blind children (space for housing heavy and bulky reading and writing equip- ment).	69.
77 <sup>*</sup> .....	to play a piano and develop and direct a rhythm band.....	77.
78.....	A knowledge or understanding of— the general plan of medical treatment of the different con- ditions which result in blindness or loss of vision.	73.
Items rated LESS IMPORTANT—(79-82)		
79.....	A knowledge or understanding of— the history of education of the blind.....	36 sg.
80.....	the basic theory of light.....	71 sg.
81.....	methods of testing vision, and the various instruments used for this purpose.	79.
82.....	methods of testing hearing, and the various instruments used for this purpose.	81.
Items rated NOT IMPORTANT		
NONE		

<sup>1</sup> For a detailed explanation of how rank orders were derived, see pp. 88 to 89 of appendix O.

<sup>2</sup> sg—denotes "significantly greater." Differences in ratings for importance and proficiency were statistically analyzed and found to be significantly greater at the one percent level of confidence; that is, the rating of importance was significantly greater than that of proficiency.

<sup>3</sup> Starred (\*) items indicate competencies which showed significant differences between opinions expressed by day and residential school teachers. See pp. 81 to 82. In all cases day school teachers rated these items more important than the residential school teachers did.

<sup>4</sup> sg: The rating of proficiency was significantly greater than that of importance.

### *Highlights of the Teacher Ratings*

What competencies did the 100 teachers of the blind regard of greatest or of least importance? Several trends stand out in their evaluations.

When the opinions of these teachers are reviewed, it appears that they considered most of the competencies in the list to be valuable, since they tended to place high importance on a large proportion of them. In fact, 30 of the 82 items had an average rating of "very important," while 48 had "important." Only 4 items were placed in the "less important" category, and no single item received an average rating of "not important." These results suggest the usefulness of the list for building and evaluating college curricula, certification requirements, and professional standards, as well as a tool for teacher self-appraisal.

From the ratings of competencies it appears that the 100 teachers believe successful instructors of the blind should have a wide array of knowledge and abilities. Examination of the ten competencies which they rated highest include: abilities to help children in *personal adjustment* especially where blindness is the problem; to *develop curricula* fitted to the individual needs of pupils; to help blind children learn to *associate with normal children*; to help children use *senses other than sight* in analyzing situations. The first ten competencies also included knowledge about the significance of *usable vision*; effects of *various socioeconomic conditions*; and the medical, emotional, psychological, social and educational *implications* of blindness. It would appear that a major concern of teachers is for the social and emotional adjustments of their blind pupils, and other psychological aspects of blindness. They also place a very high value on mental health, classroom management, and individual differences.

While the knowledge or understanding of the anatomy and physiology of the eye, although still important, was rated rather far down the list (75), the knowledge of medical, emotional and other implications of blindness (6) was valued very high. There appears to be some contradiction in the views of teachers, for without a background of understanding of the anatomy and physiology of the eye, it might be difficult to understand the implications of eye conditions. While many colleges offer general physiology courses, very few have specialized courses which would enable the teacher to understand the anatomical and pathological conditions in blindness. In view of this, perhaps the importance of such courses should be studied further with still another group of teachers.

Four competencies were rated as "less important." Two of these dealt with testing vision and hearing. This does not necessarily negate the value of such skills, but may suggest that they are being performed by



other specialists. Also rated relatively low was knowledge of the basic theory of light and the history of the education of the blind.

Teachers tended to rate *practical* skills as of greater importance, and *theoretical* knowledge as of lesser importance. Seven of the ten most highly valued competencies deal with *ability to do*, while only three are concerned with *knowledge or understanding*. In contrast, reference to items which received the lowest ratings by the teachers will show a completely reversed point of view. Only 3 of the last 10 items emphasized ability or skill in doing something, while 7 are concerned with knowledge about something.

The relatively greater importance attached to the practical competencies is, perhaps, to be anticipated. In day-to-day classroom management, the teacher is constantly confronted with the need to be able to do something about a situation. The reader should be cautioned about drawing conclusions from these evaluations, for in placing the highest value on ability to do or to act, the teacher may be unconsciously drawing upon her theoretical background of education and preparation although she may no longer identify this aspect of competence as such. Her views, however, are a major challenge to teacher-education to present theory in a context which will insure the maximum amount of transfer to increased on-the-job effectiveness. To reach the conclusion that, because these successful teachers attached lesser importance to some theory items, they should be removed from college curriculum probably is neither desirable nor justifiable.

These are but a few of the observations which will present themselves as one examines table 1 in greater detail. Most of the interpretations have been left to the reader, who will probably want to study the table in light of his own particular role in the education of blind pupils.

### *Comparison of Opinions of Day and Residential School Teachers*

It is often said that goals in the education of the blind are the same regardless of the type of school program in which the child is being educated. Some people believe, however, that there may be some differences in the skills required of day and residential school teachers in realizing these goals. A comparison was made of the importance which the 62 residential and the 38 day school teachers attached to each of the competencies. By statistical analysis<sup>6</sup> it was found that there was little difference in the value placed on the majority of the competencies by these 2 groups. There were, however, 23 items which showed statistically significant differences, at the 1 percent level of confidence,<sup>7</sup> between the average

<sup>6</sup> The method of statistical analysis is given in appendix C, p. 39-40.

<sup>7</sup> Throughout this study, differences of opinion were considered statistically significant at the 1 percent level of confidence.

ratings of importance given by the day school teachers and the residential school teachers. For the convenience of the reader, these items have been starred (\*) in table 1. In all cases the day school teachers placed a higher value on the competency.

The day school teachers, it is noted, place more importance on interpersonal relationships with adults than do residential teachers. They regard it as more necessary to be able to work with parents and with other community personnel.

Among these competencies which showed statistically significant differences were: the ability to help blind children associate naturally and freely with sighted children (item 9); the ability to help parents understand their child's potentialities (item 17); a knowledge of available resources in the community to serve the blind child (items 37 and 46); and competence in interpreting medical information (items 42 and 73). Day school teachers also rated higher several classroom skills such as developing braille stories (item 56) and operating audio aids (item 58).

As most programs exist today, the teacher in a day school may be expected to assume responsibility for a wide range of activities. Accord-



*Photo by Columbus Dispatch, Courtesy, Columbus, Ohio Public Schools*

**A Successful Educational Experiment: Blind and Sighted Pupils Learn from Each Other**



ingly, her competencies may need to be more varied. Teachers in residential situations may be more concerned with in-the-classroom instruction. Administration and supervision, the operation of special equipment, and the interpretation of medical reports may be the responsibility of other personnel employed by the school, such as the superintendent, the principal, the housemother, the psychologist, the social worker, the recreation director, and so on. In other words, the opinions may mean that day school teachers may need to provide a wider range of services to the blind child and his parents than do teachers in residential schools. This suggested difference should be further tested to see if there is evidence of real difference in function. The present findings suggest that teacher education programs should be sufficiently flexible to give adequate preparation for teaching in various types of school programs.

#### *Comparison of Opinions of Teachers with Specialized Preparation Obtained Prior to and Since January 1, 1946*

The plan of the study called for a comparison of the opinions expressed by teachers having specialized preparation taken a number of years ago with those having more recent training. It was anticipated that differences in opinions might occur between the two groups which would reflect changes in teacher education programs in recent years. (The reader will recall that, of the 100 teachers completing forms, 50 had obtained the major portion of their specialized preparation taken prior to January 1, 1946, and the other 50 within the last 7 years.) On only one item (No. 7 in rank order of importance in table 1) was a statistically significant difference found to exist. Thus, in general, one must conclude that the views held by these two groups were very similar.

#### *Personal Characteristics Needed By Teachers*

This discussion of the 100 teachers' rating of competencies would not be complete without reference to the personality of the teachers. When the broad study was undertaken, it was decided not to include personal traits in the list of competencies. This decision was made by those planning the study because (1) research has already been conducted on the personal characteristics of successful teachers and (2) it was not practical to include an intensive exploration of personality traits in this project.

The 100 teachers, however, were given an opportunity to express their views on this subject through the following free-response question: "Are there personal characteristics needed by teachers of the blind which are



different in degree or kind from those needed by teachers of normally seeing children, and if so, what are they?"<sup>8</sup> Of the 76 teachers who replied to this question, 69 did so in the affirmative, and 7 in the negative. Of the teachers who gave affirmative replies, 68 took time to comment extensively in an effort to identify the personal traits which they believed teachers should have; they stressed patience, understanding, sympathy, and a sense of humor. General belief seemed to be that all teachers need these personality traits but the teachers of the blind need them to a far greater degree.

Similar opinions were expressed by teachers of other exceptional children throughout the study. It may be that teachers of all types of the handicapped require more patience, kindness, and objectivity than do regular classroom teachers. Although this may be a debatable issue, it is to be recalled that most of these teachers had experience with both normal and handicapped children. Further exploration of this trend of opinion should be made by small and specialized studies to determine the implications for selection and preparation of personnel to educate exceptional children.

### COMPARISON OF OPINIONS OF EXPERTS AND TEACHERS ON COMPETENCIES NEEDED BY TEACHERS OF BLIND CHILDREN

Thus far the bulletin has presented the opinions of a committee of experts and of successful classroom teachers concerning specialized competencies needed to teach blind children. These two independent procedures were built into the plan of the study to provide for the comparison of the two sets of opinions which are contained in this part of the bulletin. Furthermore, these procedures were used deliberately to see whether the efforts of two groups working independently would result in similar ideas. The competency committee worked independently in preparing its narrative report, and had access neither to items on the inquiry forms nor teacher responses. This report was available neither to the teachers nor to the persons developing the list of items on the inquiry form. Participating teachers, while they did not have opportunity to identify competencies, could rate the importance of an item in a finite list of knowledges and abilities.

In considering the opinions of these two groups, it is evident that many of the same competencies were considered important by both the experts and the teachers. Comprehensiveness of both the committee statement and the list of competencies makes some rearrangement necessary for a careful

<sup>8</sup> See appendix D, form EXO-4; question No. 6.



comparison of the views of the two groups, and table 2, which follows, was devised for such a comparison. It also presents the opinions in a form that is functional for teachers, supervisors, administrators, and college instructors. To develop table 2, the committee report was minutely examined for verbatim excerpts which express separate and unique competencies. They were listed, in parallel columns, next to comparable items from teachers' evaluation of the 82 specific knowledges and abilities, listed in table 1. Competencies have been grouped under a number of general headings such as "teaching procedures," "curriculum," and "pupil adjustment."



*Courtesy, Arkansas School for the Blind*

### **Blind Children Use the Sense of Touch to Examine Models**

Table 2.—Comparison of the Opinions of the 100 Superior Teachers and the Committee of Experts Concerning Competencies Needed by Teachers of Blind Children

PHYSICAL, MEDICAL, PSYCHOLOGICAL, AND SOCIAL FACTORS  
RELATING TO BLINDNESS

WHAT THE COMMITTEE SAID<sup>1</sup> . . .

"The teacher can make use of the child's remaining senses, considering the information on personality, motivation, and other psychological factors . . . . This procedure makes it imperative that each blind child be considered as an individual with variations . . . in both physical and mental characteristics as well as variations in personality structure."

(Not specifically included in the committee report.)

"This presupposes a thorough understanding of the social, psychological, emotional, and medical implications of blindness, as they may affect the complete adjustment and happiness of these children."

"The teacher has a special obligation to the newly blinded child who may experience even greater emotional strain."

"This challenges the teacher to great understanding of the implications of blindness as they are faced by this newly blinded child and his family."

(Not specifically included in the Committee report.)

"It is also important for the teacher to have skill in observation of the child . . . for the purpose of detecting significant changes . . . in order to refer him to medical attention."

NOTE.—Throughout the parallel table the phrase "the teacher must" should read "the teacher should." This editorial change was made by the committee after table 2 had gone to the printer.

See footnotes at end of table.

WHAT THE TEACHERS SAID<sup>2</sup> . . .

*Very Important*<sup>3</sup>: The ability to recognize individual differences in each blind child and to make provisions for these (2).<sup>4</sup>

*Very Important*: A knowledge or understanding of the significance of the possible effect of socio-economic conditions and emotional climate of the home on the blind child's social, emotional, and intellectual development (3).

*Very Important*: A knowledge or understanding of the medical, emotional, psychological, social, and educational implications of blindness (6).

(Not specifically included in the list rated by teachers.)

(Not specifically included in the list rated by teachers.)

*Very Important*: The ability to recognize possible causes of social and emotional maladjustment of blind children and to participate in planning courses of action aimed at alleviating these (8).

*Very Important*: The ability to recognize symptoms that suggest the need for referral to medical personnel (13).



Table 2—Continued

## PHYSICAL, MEDICAL, PSYCHOLOGICAL, AND SOCIAL FACTORS RELATING TO BLINDNESS—Continued

WHAT THE COMMITTEE SAID<sup>1</sup> . . .

"It is important that [the teacher] have a knowledge of the effect of the loss of sight in relation to certain factors, examples of which are the following:

1. Age at onset.
2. Type of onset, traumatic or over a period of time.
3. Etiology.
4. Congenital, hereditary, or acquired.
5. Disease affecting only the eye, such as cataract, or disease complicating entire physical structure, such as diabetes.
6. History of periods of hospitalization.

"It is also important for the teacher to have an understanding of the possible implication of the various causes of blindness."

"The teacher of blind children must possess information concerning eye defects and their causes . . . ."

(Not specifically included in the committee report.)

(Not specifically included in the committee report.)

"This [development of a Braille reading program] demands the ability to determine the child's physical orientation, spatial perception and muscular coordination as well as other factors basic to good reading."

See footnotes at end of table.

WHAT THE TEACHERS SAID<sup>2</sup> . . .

*Very Important:* A knowledge or understanding of the significance of age at onset of blindness (29).

*Important:* A knowledge or understanding of the general meaning of the diagnosis and prognosis of the visual condition for each blind pupil (40).

*Important:* A knowledge or understanding of the causes of the various conditions which result in blindness or loss of vision (62).

*Important:* A knowledge or understanding of current theories and controversies concerning causes, prevention, and treatment of blindness and diseases of the eye (73).

*Important:* A knowledge or understanding of the general plan of medical treatment of the different conditions which result in blindness or loss of vision (78).

(Not specifically included in the list rated by teachers.)

Table 2—Continued

### PHYSICAL, MEDICAL, PSYCHOLOGICAL, AND SOCIAL FACTORS RELATING TO BLINDNESS—Continued

#### WHAT THE COMMITTEE SAID<sup>1</sup> . . .

"It is also important for teacher to have skill in recognizing certain physical conditions which may affect the academic achievement and the social and personality development of the child."

"It is also important for the teacher to have skill in observation of the performance of the child in relation to the day-to-day planning of his work . . . ."

"It should be obvious that the general health of all blind children is of prime concern to the teacher, not only in regard to eye care, but in relation to the total physical capacity."

(Not specifically included in the committee report.)

(Not specifically included in the committee report.)

#### WHAT THE TEACHERS SAID<sup>2</sup> . . .

(Not specifically included in the list rated by teachers.)

(Not specifically included in the list rated by teachers.)

*Important:* A knowledge or understanding of hygiene of the eye (55).

*Important:* A knowledge or understanding of anatomy and physiology of the eye (75).

*Less important:* A knowledge or understanding of the basic theory of light (80).

### PUPIL ADJUSTMENT

#### WHAT THE COMMITTEE SAID<sup>1</sup> . . .

"The overall program at all grade levels demands serious consideration of efficient living skills by every teacher."

"The education plan for the child must be based upon the total organism, which presupposes a total physical and mental health program . . . ."

"He must be able to help instill in the blind child the desire to become identified with a group and to develop a sense of belonging and contributing."

See footnotes at end of table.

#### WHAT THE TEACHERS SAID<sup>2</sup> . . .

*Very Important:* The ability to help blind children develop acceptable patterns of personal hygiene and behavior (1).

*Very Important:* The ability to create a classroom atmosphere that is conducive to good mental health (4).

(Not specifically included in the list rated by teachers.)



Table 2—Continued

## PUPIL ADJUSTMENT—Continued

## WHAT THE COMMITTEE SAID

"This teacher must also assume responsibility for constructive guidance when the child is attempting to understand his own handicap . . . ."

"Through careful guidance, the teacher should help him to realize the potential of his residual vision, to accept his limitations realistically, and to make adaptations himself . . . ."

(Not specifically included in the committee r. para.)

"He must [be able to] help each child to seek and achieve integration with his sighted friends and relatives and to accept the responsibilities of citizenship."

"... growth and development in social competency of the blind child must be a prime consideration to the alert teacher."

"The teacher must be able to help the child develop skill in social contacts and to interpret to him the obvious reasons for his possible difficulty."

"He should . . . recognize the impact of the attitudes of society as a basic handicapping factor relating to blindness . . . ."

"... the teacher must recognize that the blind child experiences emotional tension and physical strain as he enlarges his environment and meets new situations."

See footnotes at end of table.

## WHAT THE TEACHERS SAID

*Very Important:* The ability to help blind children with respect to their personal attitudes toward their physical handicap (5).

(See above.)

*Very Important:* The ability to encourage and create situations in school in which blind children have an opportunity to associate naturally and freely with children of normal vision (9).

(Not specifically included in the list rated by teachers.)

*Very Important:* The ability to help blind children with respect to their social problems (16).

(See above.)

(See above.)

(Not specifically included in the list rated by teachers.)

Table 2—Continued

## PUPIL ADJUSTMENT—Continued

WHAT THE COMMITTEE SAID<sup>1</sup> . . .

"The teacher must be able to help the child, his family, and his friends to anticipate and accept this tendency for strain."

(Not specifically included in the committee report.)

"To aid in vocational guidance and future placement of blind children, in addition to a close-working relationship with local rehabilitation organizations, the teacher should have access to a file of general State, local, and national organizations responsible for guidance and vocational information."

"Each teacher . . . should be able to view the objectives of his program in relation to the future rehabilitation service for the child and also in the light of the desired public acceptance which a reasonably well-adjusted blind person should be able to expect from society."

"The teacher must be especially skillful in developing the child's awareness of [willingness of others to help the blind] in order to offset a possible tendency to receive too much help."

"It is important the teachers observe the children as they participate in informal individual and group situations . . . evaluate them . . . and [skillfully] followup with frank and honest discussions with the child about his behavior in a given situation."

See footnotes at end of table.

WHAT THE TEACHERS SAID<sup>2</sup> . . .

(Not specifically included in the list rated by teachers.)

*Very Important:* The ability to help blind children with respect to their educational problems and the relationship of the educational program to future placement (25).

*Very important:* The ability to help blind children with respect to their vocational problems and life goals (30).

(Not specifically included in the list rated by teachers.)

(Not specifically included in the list rated by teachers.)

(Not specifically included in the list rated by teachers.)



Table 2—Continued

## CURRICULUM

WHAT THE COMMITTEE SAID<sup>1</sup> . . .

"In this important area [physical orientation and travel] curriculum variation implies that the teacher must have skill in selecting suitable points of interest for field trips. . . . Even greater skill is necessary . . . to bring the experience into focus for the blind child."

"It should be obvious that the general health of all blind children is of prime concern to the teacher. . . ."

"The teacher should be aware of the various modes of travel and of the philosophy concerning each. . . ."

" . . . activities should be planned in an atmosphere of freedom and exploration which will continue to improve the skills basic to the children's physical orientation and travel."

"It also implies the importance of the teacher's developing recreational skills which are basic to his happiness in normal functional living."

"The social studies curriculum is rich in opportunities to bring citizenship experiences to the blind child with emphasis on his privilege as a citizen and his responsibilities to others."

"The good teacher will be anxious for these children to have an opportunity to participate in musical activities and to learn to appreciate all types of music."

See footnotes at end of table.

WHAT THE TEACHERS SAID<sup>2</sup> . . .

*Very Important:* The ability to organize and plan field trips for blind children which bring as many objects as possible within their arm's reach (18)..

*Very Important:* The ability to provide opportunities in the curriculum for health education (22).

*Very Important:* The ability to provide blind pupils with opportunities in the curriculum for experiences in physical education (skill in orientation and travel, including recreational activities (23).

(See above.)

(See above.)

*Very Important:* The ability to coordinate the learning process around socially meaningful central themes (28).

*Important:* The ability to provide opportunities in the curriculum for experiences in music (35).

Table 2—Continued

## CURRICULUM—Continued

WHAT THE COMMITTEE SAID <sup>1</sup> . . .

"The ability to inspire creative arts in the blind child and to experiment with various media where work seems promising can be of great value to the teacher in his understanding of the child."

"The teacher should be able to offer the child carefully selected examples of all types of art which have meaning for him."

"This teacher must possess the same ingenuity in making sure that the blind child has access to effective total programs in physical education, home economics, vocational education, and creative arts, including music."

(Not specifically included in the committee report.)

"Every teacher . . . will recognize his need for competency in developing a functional curriculum in the portion of the program for which he is responsible."

(Not specifically included in the committee report.)

"The teacher . . . must be able to determine the blind child's readiness for increased and more complicated number experiences."

"Particularly with the blind child, the teacher should be able to evaluate genuine progress in and understanding of arithmetic."

"He must have a genuine belief in the program [and] a knowledge of how to develop it in terms of the child . . ."

See footnotes at end of table.

WHAT THE TEACHERS SAID <sup>2</sup> . . .

*Important:* The ability to provide blind pupils with opportunities in the curriculum for experiences in arts and crafts (47) . . . dramatic arts (51) . . . fine arts (60) . . . domestic arts (54) . . . industrial arts (71).

(See above.)

(See above.)

*Important:* The ability to understand curriculum and its adaptation at both the elementary and secondary levels well enough to teach blind children at more than one level when necessary (57).

(Not specifically included in the list rated by teachers.)

*Important:* The ability to play a piano and develop and direct a rhythm band (77).

(Not specifically included in the list rated by teachers.)

(Not specifically included in the list rated by teachers.)

(Not specifically included in the list rated by teachers.)



Table 2—Continued

## CURRICULUM—Continued

WHAT THE COMMITTEE SAID<sup>1</sup> . . .

"Each teacher . . . must have the ability to develop a curriculum . . . on the basis of the potential which the blind child has . . ."

WHAT THE TEACHERS SAID<sup>2</sup> . . .

(Not specifically included in the list rated by teachers.)

## METHODS USED IN TEACHING CHILDREN OTHER THAN BLINDNESS

## WHAT THE COMMITTEE SAID . . .

"The teacher of blind children should possess the same competencies expected of teachers of all children."

## WHAT THE TEACHERS SAID . . .

*Very Important:* A knowledge or understanding of methods and techniques of teaching the normal child (27).

"It is necessary that the teacher of blind children be able to evaluate current trends in general education in relation to the needs of blind children. . . ."

(See above.)

"Certain information and procedures from related areas of special education are also important to the teacher in meeting the varying needs of blind children with additional handicaps."

*Very Important:* A knowledge or understanding of the methods and techniques of teaching the socially and emotionally disturbed child (15).

(See above.)

*Important:* A knowledge of the methods and techniques of teaching the mentally retarded child (30).

(See above.)

*Important:* A knowledge or understanding of the methods and techniques of teaching the gifted child (64).

## TEACHING PROCEDURES

## WHAT THE COMMITTEE SAID . . .

(Not specifically included in the committee report.)

## WHAT THE TEACHERS SAID . . .

*Very Important:* The ability to help blind children use the senses of touch and hearing in analyzing a situation (7).

"Certain blind children have useful residual vision which is important in forming and developing concepts in the educational process."

*Very Important:* An understanding of the significance of amount of usable vision (10).

See footnotes at end of table.

Table 2—Continued

## TEACHING PROCEDURES—Continued

WHAT THE COMMITTEE SAID<sup>1</sup> . . .

"Through systematic observation of the behavior of the child in classroom situations the teacher should attempt to develop skill in determining the visual efficiency of each child. . . ."

" . . . the teacher . . . brings experiences close to the child and interprets the physical environment when necessary. . . ."

"The teacher must also know the child's physical capacity . . . in reading and writing braille . . . the teacher must be aware of the fatigue element and possible tension."

"In planning the use of equipment and in making program adjustments, the physical energy of the blind child should be conserved."

"The teacher should be able to adjust the program to . . . partially blind children."

"It is important that curriculum, methods of instruction, and environment be adapted to the individual needs of the several eye conditions found in school children."

" . . . it is significant that the teacher understand the use of visual aids including those found in the regular market and those especially designed for the use of children with limited vision."

" . . . the teacher . . . should be able to invite the blind child to share in connected and creative thoughts the actual events which were a part of the project. . . ."

See footnotes at end of table.

WHAT THE TEACHERS SAID<sup>2</sup> . . .

(Not included in the list rated by the teachers.)

*Very Important:* A knowledge or understanding of the importance of initiating all experiences in the program within the arm's reach of each blind child, and being ready to interpret that which he cannot reach (12).

*Very Important:* A knowledge or understanding of the most efficient use of hearing and vision with the least amount of fatigue for blind children (20).

(See above.)

*Important:* A knowledge or understanding of methods and techniques of teaching the partially seeing child (34).

(See above.)

(Not specifically included in the list rated by teachers.)

(Not specifically included in the list rated by teachers.)



Table 2—Continued

## TEACHING PROCEDURES—Continued

WHAT THE COMMITTEE SAID<sup>1</sup> . . .

"The teacher should learn from the blind child his concepts and language facility and stimulate him to acquire the listening skills which are so vital to his learning process."

"The teacher must be able to develop 'learning-by-listening' skills and to teach the child to use [audiovisual] equipment effectively and to care for it."

"He must learn that the blind child is deprived of the visual stimulation which provides the incidental learning of early years. The teacher must have the ability to fill this need and provide for well-structured situations which will relate the child to his environment."

"The teacher should achieve . . . skill in adapting braille material to meet the individual needs, using avenues of learning which are real to the child."

WHAT THE TEACHERS SAID<sup>2</sup> . . .

(Not specifically included in the list rated by teachers.)

*Important:* The ability to operate and use audio-aids (58).

(Not specifically included in the list rated by teachers.)

(Not specifically included in the list rated by teachers.)

## READING AND WRITING

WHAT THE COMMITTEE SAID<sup>1</sup> . . .

"The teacher . . . must be able to demonstrate the use of all of the tools of reading and writing. . . ."

"The teacher . . . must understand the importance of each [of the tools of reading and writing] to the efficiency of the blind child."

" . . . this teacher must be alert to the blind child's readiness for reading."

See footnotes at end of table.

WHAT THE TEACHERS SAID<sup>2</sup> . . .

*Very Important:* The ability to develop the blind child's skill in using special aids and appliances . . . such as talking books (19).

(Not specifically included in the list rated by teachers.)

*Very Important:* A knowledge or understanding of factors related to readiness for braille reading and writing (14).

Table 2—Continued

## READING AND WRITING—Continued

WHAT THE COMMITTEE SAID<sup>1</sup> . . .WHAT THE TEACHERS SAID<sup>2</sup> . . .

"The teacher should achieve ability to recognize individual readiness (physical, emotional, and social) of each child to use braille."	<i>Very Important:</i> A knowledge or understanding of factors related to readiness for braille reading and writing (14).
"Effective teaching of writing skills . . . requires recognition of the point at which the child has sufficient skills in reading to enable him to learn to write braille without hindering his reading."	(See above.)
"Effective teaching of writing skills requires . . . recognition of readiness in relation to the child's muscular coordination and spatial orientation."	(See above.)
"Effective teaching of writing skills requires . . . recognition of the fact that reading and writing braille require separate types of mechanical skills and that fluency in reading may be hindered by the analysis required in writing braille."	(See above.)
"He must recognize that the braille system provides the best source of reference for the blind person and that it is still the only means of writing that furnishes the blind child with a permanent record."	(Not specifically included in the list rated by teachers.)
"The teacher should achieve the ability to impart to the student the appreciation of braille reading as a thought-getting process and as a means of extending his experience and enlarging his horizons."	(Not specifically included in the list rated by teachers.)
". . . the teacher must develop [the braille writing] program in an atmosphere of support and security; . . ."	(Not specifically included in the list rated by teachers.)
(See above.)	<i>Very Important:</i> The ability to teach braille (21).
"The teacher should achieve facility in reading and writing braille . . ." See footnotes at end of table.	<i>Important:</i> The ability to write braille with ease (38).



Table 2—Continued

## READING AND WRITING—Continued

WHAT THE COMMITTEE SAID <sup>1</sup> . . .

"The teacher should [know] the mechanics of transcribing braille material for each learning level. . . ."

"Effective teaching of writing skills requires . . . a knowledge of the various braille codes such as music, mathematics, and foreign languages."

"The teacher should . . . be able to develop worksheets and individual lesson material for the children."

"Effective teaching of writing skills requires . . . [competency in providing] for instruction in typing or for the referral . . . of instruction to the proper person. . . ."

"It is important to develop in blind children skill in the use and care of [typewriting] equipment."

"He will know . . . that the typewriter furnishes the most legible method of communication and provides an opportunity for speed and facility. . . ."

(Not specifically included in the committee report.)

"Effective teaching of writing skills requires . . . ability to provide blind children an opportunity to learn to write with pencil. . . ."

"Effective teaching of writing skills requires . . . skill in developing a desire in the child for [writing with pen and pencil]."

"The teacher will understand that the use of the pencil is important . . . as a means of communication . . . and . . . in legal and social situations."

See footnotes at end of table.

WHAT THE TEACHERS SAID <sup>2</sup> . . .

(Not specifically included in the list rated by teachers.)

(Not specifically included in the list rated by teachers.)

*Important:* The ability to develop and prepare work sheets and experience stories in braille (56).

*Important:* The ability to teach touch typing (43).

(Not included in the list rated by the teachers.)

(Not included in the list rated by the teachers.)

*Important:* The ability to touch type (70).

*Important:* The ability to teach writing and the use of the pen or pencil (67).

(Not included in the list rated by the teachers.)

(Not included in the list rated by the teachers.)

Table 2—Continued

## MATERIALS AND EQUIPMENT

WHAT THE COMMITTEE SAID . . .<sup>1</sup>

"[The teacher should have] a knowledge of the specialized aids and appliances . . . [such as] the braille writing devices, arithmetic aids, adaptations of geographic and other scientific aids, adaptations of recreational facilities and games, devices to aid in efficient living such as the various guidance devices for physical orientation."

"The teacher of blind children must be unusually resourceful in the selection and use of equipment which may be adaptable to the education of blind children."

"Effective teaching of writing skills requires . . . knowledge of the equipment and materials in the field available for writing and the ability to choose that which is best suited for the individual."

"The teacher should be aware of the special equipment which is available through specialized agencies and schools and must know how to secure it; . . ."

"Effective teaching of writing skills requires an understanding and evaluation of the various published courses in braille reading and writing as well as the special types of equipment."

"The teacher should achieve an awareness of the available material already in braille suitable to the specific needs of the blind child . . ."

"The teacher must be able to recognize the value of the various specially adapted mathematical aids . . ."

See footnotes at end of table.

WHAT THE TEACHERS SAID . . .<sup>2</sup>

(Not specifically included in the list rated by teachers.)

(Not specifically included in the list rated by teachers.)

*Very Important:* A knowledge or understanding of types, sources of procurement, and uses of special equipment and materials for writing braille (26).

(Not specifically included in the list rated by teachers.)

(Not specifically included in the list rated by teachers.)

(Not specifically included in the list rated by teachers.)

(Not specifically included in the list rated by teachers.)



Table 2—Continued

## MATERIALS AND EQUIPMENT—Continued

WHAT THE COMMITTEE SAID<sup>1</sup> . . .

"... he should be able to justify the expense [of special equipment] in terms of its use."

"Effective teaching of writing skills requires . . . recognition of the space required for housing of reading and writing equipment . . ."

"He should be . . . cognizant of the importance of testing equipment with blind children and evaluating the results for the possibility of wider use."

WHAT THE TEACHERS SAID<sup>2</sup> . . .

*Important:* The ability to interpret to administrators and supervisors the importance of careful selection of personnel, justification of expensive equipment, and organizational procedures for the education of blind pupils (48).

*Important:* The ability to work with architects and school administrators in planning and securing classroom and other special school equipment and storage facilities for blind children (space for housing heavy and bulky reading and writing equipment) (76).

(Not specifically included in the list rated by teachers.)

## TESTS AND RECORDS

WHAT THE COMMITTEE SAID<sup>1</sup> . . .

(Not specifically included in the committee report.)

(Not specifically included in the committee report.)

"... he should have the ability to interpret the ophthalmological records and eye reports so that the behavior of the child can be interpreted in the light of an understanding of the eye condition."

(Not specifically included in the committee report.)

See footnotes at end of table.

WHAT THE TEACHERS SAID<sup>2</sup> . . .

*Important:* The ability to make educational interpretations from psychological reports (33).

*Important:* The ability to make educational interpretations from reports of social workers (39).

*Important:* The ability to make educational interpretations from ophthalmological and other medical reports (42).

*Important:* The ability to keep and use individual, cumulative records of blind children (44).

Table 2—Continued

## TESTS AND RECORDS—Continued

WHAT THE COMMITTEE SAID <sup>1</sup> . . .

" . . . curricular procedures must evolve because of intelligent use and interpretation of objective measurements applicable to blind children."

(See above.)

(See above.)

(Not specifically included in the committee report.)

"It is also important for the teacher to have knowledge of the current screening devices in vision and where necessary, facility in using them to indicate the visual efficiency of the child."

(See above.)

(Not specifically included in the committee report.)

WHAT THE TEACHERS SAID <sup>2</sup> . . .

*Important:* The ability to administer to blind children aptitude tests (66).

*Important:* The ability to administer to blind children individual tests of mental ability (68).

*Important:* The ability to administer to blind children group achievement tests (74).

*Important:* The ability to administer to blind children informal tests of hearing efficiency (69).

*Important:* The ability to administer to blind children informal tests of visual acuity (72).

*Less important:* A knowledge or understanding of the methods of testing vision, and the various instruments used for this purpose (81).

*Less important:* A knowledge or understanding of methods of testing hearing, and the various instruments used for this purpose (82).

## RESEARCH, HISTORY, AND LAWS PERTAINING TO THE BLIND

WHAT THE COMMITTEE SAID <sup>1</sup> . . .

(Not specifically included in the committee report.)

See footnotes at end of table.

WHAT THE TEACHERS SAID . . . <sup>2</sup>

*Important:* A knowledge or understanding of reference materials and professional literature and journals on the education and psychology of the blind (49).



Table 2—Continued

## RESEARCH, HISTORY, AND LAWS PERTAINING TO THE BLIND—Con.

WHAT THE COMMITTEE SAID<sup>1</sup> . . .

(Not specifically included in the committee report.)

(Not specifically included in the committee report.)

(Not specifically included in the committee report.)

WHAT THE TEACHERS SAID<sup>2</sup> . . .

*Important:* A knowledge or understanding of the findings of research studies which have bearing on the education, psychology, and social status of the blind (53).

*Important:* A knowledge or understanding of educational provisions for blind children under existing Federal, State, and local laws and regulations (59).

*Less important:* A knowledge or understanding of the history of the education of the blind (79).

## RELATED AGENCIES AND ORGANIZATIONS

WHAT THE COMMITTEE SAID<sup>1</sup> . . .

"It is also important for the teacher to have a knowledge of the existing facilities to which the parents might turn to receive such medical services as treatment, surgery, provision for glasses, should the parents not be able to afford these costly services."

"... the teacher should be familiar with the local, State, and national resources for all children, as well as with the specialized agencies serving blind individuals at all age levels."

"... the teacher should know of the services available through child welfare, family service, maternal and child care agencies, and other similar public and private organizations."

See footnotes at end of table.

WHAT THE TEACHERS SAID<sup>2</sup> . . .

*Important:* A knowledge or understanding of existing facilities to which parents may turn to receive medical services, glasses, and so on for their blind child, should they be unable to afford these (37).

*Important:* A knowledge or understanding of the purposes, services, and locations of national organizations concerned with the education or general welfare of the blind, such as the International Council for Exceptional Children, American Foundation for the Blind (45).

*Important:* A knowledge or understanding of the location of, and the services offered by, various non-school local organizations (such as clinics, health departments, and vocational rehabilitation agencies) for blind children and their parents (46).

Table 2—Continued

## RELATED AGENCIES AND ORGANIZATIONS—Continued

## WHAT THE COMMITTEE SAID . . .

"His understanding should include a knowledge of such services and child guidance clinics; psychological, social, and medical services; and civic and religious organizations."

"The skillful teacher . . . understands the importance of wise referral of problems which can be better worked out elsewhere."

"Through correct evaluation of a resource, the teacher should be able to use those services which effectively meet his pupils' needs."

"It is important that the teacher . . . understand the valuable service offered by State and local organizations serving other groups of handicapped children. This . . . can help the teacher solve problems of blind children with multiple handicaps."

"It is perhaps of greatest importance to blind children that the teacher select with care the professional organization in general education in which he can participate most effectively. Such participation will aid him in evaluating trends and making logical curriculum adaptations and in interpreting the needs of blind persons to general educators."

"Every teacher, recognizing the need for continued help in developing skills in physical orientation at each level of his growth . . . should be aware of the available facilities for training."

See footnotes at end of table.

## WHAT THE TEACHERS SAID . . .

*Important:* A knowledge or understanding of the location of, and the services offered by, various non-school local organizations (such as clinics, health departments, and vocational rehabilitation agencies) for blind children and their parents (46).

(Not specifically included in the list rated by teachers.)

(Not specifically included in the list rated by teachers.)

(Not specifically included in the list rated by teachers.)

(Not specifically included in the list rated by teachers.)

(Not specifically included in the list rated by teachers.)



Table 2—Continued

## PUBLIC RELATIONS

WHAT THE COMMITTEE SAID<sup>1</sup> . . .

" . . . the teacher of blind children must be able to interpret courageously the needs and abilities of blind children to society . . ."

"This teacher should be able to . . . interpret [the blind child's] problems to others who desire to help him."

(See above.)

"He should also be able, when necessary, to interpret the needs of blind individuals to these [various public and private] agencies."

"He must have . . . a willingness to interpret the program through his own acceptance of blind individuals as people who are blind."

WHAT THE TEACHERS SAID<sup>2</sup> . . .

*Important:* The ability to interpret special educational programs for, and the problems and abilities of, the blind to the general public (31).

*Important:* The ability to interpret special education programs for, and the problems and abilities of the blind, to regular school personnel (36).

*Important:* The ability to interpret special educational programs for, and the problems and abilities of, the blind to non-professional school workers, such as bus attendants and school custodians (65).

(Not specifically included in the list rated by teachers.)

(Not specifically included in the list rated by teachers.)

## COOPERATION WITH OTHER ADULTS

WHAT THE COMMITTEE SAID<sup>1</sup> . . .

"He will also understand and appreciate the place of all members of the team of co-workers in his school who are working toward the ultimate goals desirable for each child in his educational program."

"It is also important for the teacher to have ability to cooperate efficiently with a team of professional workers such as the ophthalmologist, pediatrician, nurse, and social worker, in the best interest of the child and his family."

See footnotes at end of table.

WHAT THE TEACHERS SAID<sup>2</sup> . . .

*Very important:* The ability to cooperate with other special teachers and regular school personnel in developing an integrated educational program for each blind child (24).

*Important:* The ability to work as a member of a team with other professional workers, such as medical and psychological personnel, in making a case study of a blind child aimed at planning a program suited to his needs and abilities (32).

Table 2—Continued

## COOPERATION WITH OTHER ADULTS—Continued

WHAT THE COMMITTEE SAID <sup>1</sup> . . .

(Not specifically included in the committee report.)

"In his association with parents [the teacher], should have the ability to interpret the ophthalmological records or eye reports so that the behavior of the child can be interpreted in light of an understanding of the eye condition."

"The teacher should be able to talk over with the parents . . . the possible effects of the eye condition on the educational achievement, the personality development, and to some extent the future occupational plans of their child."

(See above.)

(Not specifically included in the committee report.)

WHAT THE TEACHERS SAID <sup>2</sup> . . .

*Important:* The ability to contribute to community leadership in establishing an educational program for blind children (61).

*Very Important:* The ability to help parents with their child's limitations and potentialities (17).

*Important:* The ability to help parents with school placement (41).

*Important:* The ability to help parents with occupational placement (63).

*Important:* The ability to participate in parent-school activities (52).

## PERSONAL CHARACTERISTICS

WHAT THE COMMITTEE SAID <sup>1</sup> . . .

"[The teacher's] voice must be especially pleasing . . . and must inspire confidence and a sense of security in the blind children."

" . . . physical and mental health of the highest quality."

See footnotes at end of table.

WHAT THE TEACHERS SAID <sup>2</sup> . . .

*Very Important:* The ability to enunciate clearly and pronounce correctly in a pleasing voice (11).

(This comparison is restricted to the 82 items in table 1. For additional views of the responding teachers about personal characteristics, see pp. 33 to 34).



Table 2—Continued

## PERSONAL CHARACTERISTICS—Continued

WHAT THE COMMITTEE SAID <sup>1</sup> . . .WHAT THE TEACHERS SAID <sup>2</sup> . . .

" . . . versatility, flexibility, ingenuity, imagination, and complete acceptance of the child . . . ."

" . . . interest in and knowledge of the child's family, friends, and community."

"Perhaps the most significant factor in the successful functioning of the teacher of the blind children is his own attitude toward blindness. He should understand his own feelings about the individual needs and problems arising from blindness."

"As an indication of his understanding . . . of blind persons he must avoid either over identification with them or over simplification of their problems."

"understanding and resourcefulness . . . ."

<sup>1</sup> Based on Competency Committee Report, pp. 6 to 23.

<sup>2</sup> Based on table 1, pp. 24 to 29.

<sup>3</sup> Degree of importance ascribed to the item in table 1.

<sup>4</sup> Rank order ascribed to the item in table 1.

In all the major areas of competence, the committee identified some knowledges and abilities paralleling those evaluated as important by the teachers. The views of the two groups reinforce each other to a remarkable extent even though they were collected through different techniques. Both through the description in the committee's report and the teachers' ratings we get the picture of a person with a rather wide array of competencies. Both groups want the teacher of the blind to understand individual differences, general problems of the blind, eye defects and their causes, use of reports and knowledge of such special aids as screening devices. The teacher should provide a healthy atmosphere within which the child may grow socially, and develop an understanding of his handicap. Both groups cited ability to provide a broad and adjusted curriculum which brings experiences close to the child, and which utilizes all available resources. Within this wide range of activities, the teacher should also possess certain specific skills, such as knowledge of teaching reading and writing, especially braille. Both groups indicate as important the ability to interpret problems of the blind to society, to work with parents, and to know about existing agencies and services for the blind. These are but a few of the major competencies agreed on as important by both groups. Inspection of the table will reveal further similarities.

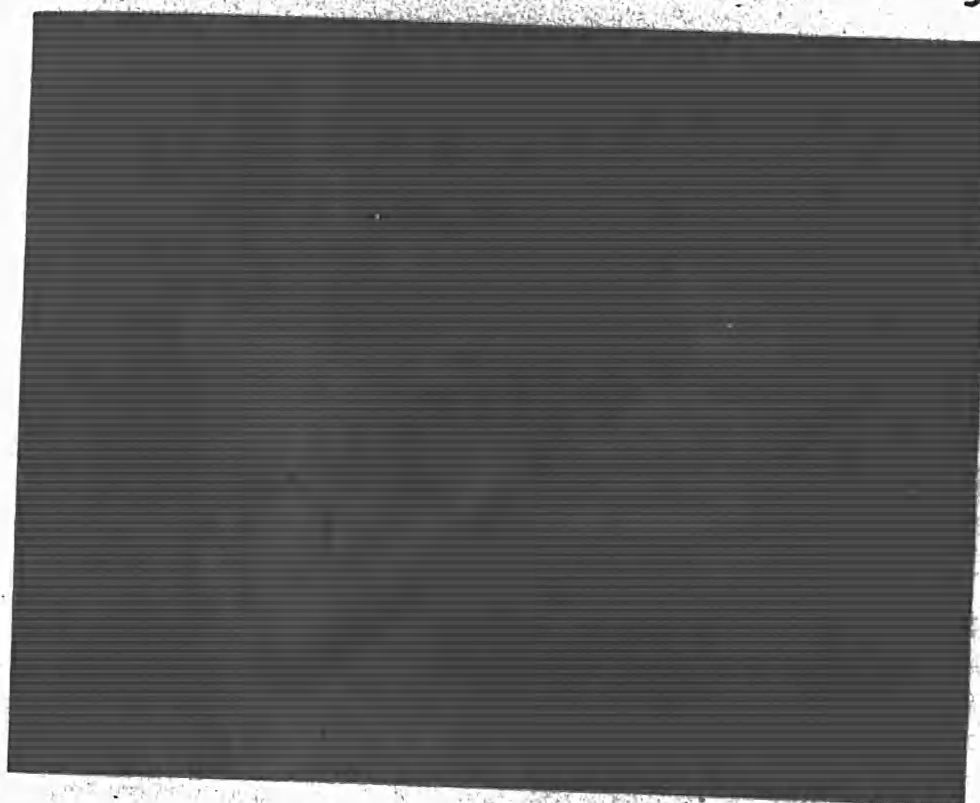
While the two groups expressed marked similarity of opinion, there were a few minor points of difference which should be noted. Some competencies were stressed by the teachers and omitted from the committee report and vice versa.<sup>9</sup>

Two areas of knowledges which were considered of importance by the teachers and which do not appear specifically in the committee report were: "The findings of research studies which have bearing on the education, psychology, and social status of the blind," and "reference materials and professional literature and journals on the education and psychology of the blind." Also considered important by the teachers, but not specifically mentioned by the committee, was the knowledge of "educational provisions for blind children under existing Federal, State, and local laws and regulations."

Another group of competencies which the teachers ranked important concerned the ability to make educational interpretations from psychological and medical reports and from reports of social workers. The

<sup>9</sup> Discretion should be used in interpreting table 2. Although a specific competency appears to be important to both groups, there is still no basis for concluding agreement as to relative importance. When a specific knowledge or ability is considered important by teachers but not cited in the committee report, several possibilities may account for the omission: (a) a specific competency may have been overlooked in itemizing excerpts from the narrative report; (b) excerpts from the report are now out of context. When a specific knowledge or ability appears in the committee's column but not in the teachers' column, no conclusions concerning their relative importance are possible since teachers rated a finite list of competencies and were given no opportunity to add knowledges or abilities which they felt were important.





Courtesy, Boston Public Schools

#### Effective Use of the Braille writer through Successful Teaching

committee, however, only *specifically* mentioned the value of interpretation of medical reports, including those of ophthalmologists.

A skill ranked very high on the list of competencies rated by teachers was the ability "to encourage and create situations in school in which blind children have an opportunity to associate naturally and freely with children of normal vision." No comparable item was specifically mentioned in the report of the competency committee.

Just as some competencies included in the inquiry form sent to teachers were omitted from the competency committee report, so a number of items in the report were not included on the inquiry form. Examples were:

1. The teachers should know the various braille codes such as music, arithmetic, and foreign language.
2. The teacher . . . must be able to determine the blind child's readiness for increased and more complicated number experiences.
3. The teacher must be unusually resourceful in the selection and use of equipment which may be adaptable to the education of blind children.
4. The teacher has a special obligation to the newly blinded child who may experience even greater emotional strain.

5. Skillful teachers must . . . understand the importance of wise referral of problems which can be better worked out elsewhere.

Of interest in the competency report is the attention given to personal qualities of the teacher. The committee emphasized the teacher's need for good physical and mental health, versatility, ingenuity, his attitude toward blindness, and sympathy. This emphasis parallels opinions expressed by the 100 teachers in their free response comments concerning distinctive personal qualities needed by teachers of the blind.

The committee report contains many more competency items than those rated by teachers. This was probably largely due to the creative approach of the committee, and their natural desire to set forth an ideal and complete set of qualifications. It is not surprising that some items which were stressed on the questionnaire were too specific for the committee to treat according to the same terminology.

The comparison of the views of both the competency committee and the 100 superior teachers as arranged in table 2, will, it is hoped, be of major use to teachers in setting their own professional goals, to staff members of colleges and universities in program planning, and to special education personnel in State and local school systems in teacher selection and certification. While it should prove valuable, it is hoped that the information it contains will not be used for rigid standards for the qualifications needed by teachers of the blind.



## OPINIONS ON THE EFFECTIVENESS OF SOME TEACHERS

**H**OW WELL do teachers of the blind teach? Obviously, no general response can be given to such an all-encompassing question. In order to venture an answer which would apply even to a local community, techniques other than those employed in this study would be required. However, some opinions were collected which reflect the thinking of at least some special educators about the competence of a number of teachers of the blind. These impressions provide clues to the effectiveness of such teachers; at the same time they suggest implications for preservice and inservice professional preparation.

The opinions reported herein came from the 100 classroom teachers of the blind, and from the State and local directors and supervisors of special education. First, the self-appraisal of competence of the participating teachers will be reported, and second, the views of the State and local supervisory personnel on the specialized preparation of teachers of the blind in their school systems who obtained their specialized preparation within the 7-year period prior to the collection of the data.

### THE TEACHERS APPRAISE THEIR OWN PROFICIENCY

The 100 superior teachers of blind children not only rated the set of 82 competencies for relative importance, but also rated themselves for proficiency in the same items. These were based on a scale of "good," "fair," and "not prepared." The rank orders of the average ratings of proficiency for each of the 82 competencies are to be found in the right-hand column of table 1 (p. 24).<sup>1</sup> On 44 of the 82 competencies the teachers gave themselves an average rating of "good," on 37 "fair," and on 1 "not prepared."

#### *Comparison of the "Proficiency" Ratings of Day and Residential School Teachers*

To see if participating teachers in day schools evaluated their own proficiencies differently from those in residential, the average rating of proficiency which the day school teachers as a group gave to each of the competencies was compared with the average rating of proficiency which

<sup>1</sup> See appendix C (pp. 88 to 89) for a detailed description of how these rank orders were derived.



the residential school teachers gave to the competencies. On 15 of the 82 competencies a statistically significant difference of opinion between the two groups was found; in each case the day school teachers rated themselves more proficient in the competencies than did the residential school teachers. While these competencies related to various functions, most of them had something to do with curriculum and methods of teaching, contacts with parents and other lay people, and medical interpretations of blindness.<sup>2</sup> Perhaps the demands of the different school and teaching situations may account for these differing opinions, but further study should probably be undertaken in order to best identify reasons for such differences.

### *Comparison of the Proficiency Ratings of Teachers Trained Prior to and Since January 1, 1946*

The reader will recall that a comparison was made between the rating of "importance" attached to the items in table 1 by the subgroup of teachers having taken their specialized preparation more than 7 years before the data were gathered and by the more recently trained teachers (see p. 33). A comparison was also made of the ratings of these two subgroups on their self-appraisals of "proficiency." It was found that a significant difference existed on only one of the 82 competencies (item 7), thus suggesting<sup>1</sup> that the proficiency of these two groups of teachers was essentially the same. It would be hazardous to imply that their specialized preparation was very similar, since the present proficiencies of teachers trained a number of years ago have probably been markedly influenced by in service preparation and on-the-job experience. However, the data do parallel that given on page 33 of this bulletin. These data tend to indicate the possibility that programs for training of teachers of the blind have remained relatively static in the last decade or so.

### RELATIONSHIP BETWEEN RATINGS OF IMPORTANCE AND RATINGS OF SELF-COMPETENCE

One might ask whether there was a tendency for teachers to give themselves highest ratings on those competencies which they valued as "most important," and vice versa. To get some information on this question, a random sampling of 10 items was examined for covariation<sup>2</sup> between each

<sup>1</sup> Refer to Table 1, pages 24 to 29, items numbered 36, 37, 40-43, 46, 54, 56, 58, 60, 62, 65, 73, 75.

<sup>2</sup> Covariation was measured by the coefficient of contingency; the statistical significance of the magnitude of the relationship was then tested by the chi-square technique. Using the 1 percent level of confidence, the magnitude of the relationship was found to be statistically significant for 7 of the 10 items. For further description of statistical procedures see appendix C, pp. 90 to 91.



individual teacher's rating of importance and his rating of self-competence.

Based on this statistical analysis there was, in general, a significant positive correlation between the evaluations. A rating of "very important" was often accompanied by a self-appraisal of "good," and vice versa. However, the degree of correlation varied. In some cases it was high, in others relatively low. But again, in general it would be fairly safe to say that often the teachers rated items very important when they considered themselves well qualified, and less important when they considered themselves less qualified.

### *Ratings of Importance Greater Than Ratings of Proficiency*

In spite of the tendency for responding teachers to parallel their ratings of importance and of self-competence, there were some items in which the average ratings of importance were higher than the average rating of proficiency. On 14 of these competencies, the differences were statistically significant at the one percent level of confidence.<sup>4</sup> These are marked in table 1 by the affixation of sg (significantly greater) to the rank order in the left-hand column.

The 14 items where significant differences were found to exist may deserve greater attention than any others in this report. Instructors may wish to examine their sequences of preparation to find ways and means of putting greater emphasis on these points. However, some discrimination must be employed in the use of this information. It will be noted in table 1 that 5 of the 14 items in which importance was rated significantly greater than self-competence occur in the "very important" classification, while the other 9 fall into the "important" category. Probably the five items in the "very important" classification should be among the first consideration in further self-study projects or in planning a college curriculum.<sup>5</sup>

*Enrichment of the curriculum for blind children* is stressed in 5 of the 14 items.<sup>6</sup> This difference might suggest a need on the part of the 100 teachers for more ability to provide blind children with opportunities for experiences in physical education, music, arts and crafts, domestic arts, and industrial arts. These opinions may be influenced by the fact that these experiences are often provided by special teachers or through other resources.

<sup>4</sup> For a detailed description of the statistical procedure, see appendix C, p. 92.

<sup>5</sup> Refer to table 1, pages 24 to 25; items 3, 6, 15, 23, and 30.

<sup>6</sup> Refer to table 1, pp. 25 to 28, items numbered 23, 25, 47, 54 and 71.



Courtesy, Arkansas School for the Blind

### The Experienced Teacher's Guidance Is Important

Competence in *vocational counseling*, while in the top third of items valued high, was still among those on which the teachers felt less effective than the skill would warrant.<sup>7</sup> They also believed that administering tests was an important ability in which they felt less qualified to participate. On both counseling and testing, the teachers may again regard this mainly as a function of some other individual resource, although further study could well be made of this matter.

Teachers indicated some lack of proficiency in teaching the socially mal-adjusted (item 15). Closely related to this is a relatively low rating of their knowledge and insight into the effect of the home on the development of the blind child (item 3). Two other competencies receiving relatively low ratings of proficiency concerned technical implications of blindness (6), and the ability to teach touch typing (43).

<sup>7</sup> See items 30, 63, 66, 68, and 69.



*Ratings of Importance Less Than Ratings of Proficiency*

There were some competencies on which it appeared by inspection that the 100 superior teachers' ratings of *importance* were less than their ratings of *self-proficiency*. Through the standard statistical procedure just described above, it was found that on 11 of these competencies, the differences were statistically significant.<sup>8</sup>

It was not within the scope of this study to identify the reason for these differences, thus discretion should be used in making interpretations. From table 1, the reader will note that, while none of the items was rated *very important*, 9 received ratings of *important*,<sup>9</sup> only 2 of *less important*,<sup>10</sup> and not one of *not important*.

It cannot be concluded that teacher competence should be reduced on the 9 items rated important. It must be remembered that the 100 responding teachers were superior, so presumably they would be highly proficient in such abilities as curriculum development (57) and community relationships (65).

More significance may well be attached to the items rated *less important*. These related to a knowledge of the history of the education of the blind, and the theory of light.

The differences reported here identify several areas for further research. It was not within the scope of this study to give conclusive reasons for the variability between the two sets of ratings.

## DIRECTORS AND SUPERVISORS OF SPECIAL EDUCATION EVALUATE THE EFFECTIVENESS OF SOME RECENTLY PREPARED TEACHERS OF THE BLIND

Supervisory personnel and special educators who give leadership from State and local departments of education expressed opinions on the professional competence of recently graduated teachers of the blind working in their own school systems. It must be pointed out to the reader that opinions expressed in the preceding paragraphs were self-ratings of proficiency by a relatively small group of 100 superior teachers. The views of the supervisory personnel which are to be reported below concern teachers

<sup>8</sup> These 11 items are marked in table 1 by the affixation of *sg* (significantly greater) to the rank orders in the right-hand column.

<sup>9</sup> Refer to table 1, pp. 25 to 29, item numbers 38, 44, 45, 49, 53, 57, 65, 70, and 75.

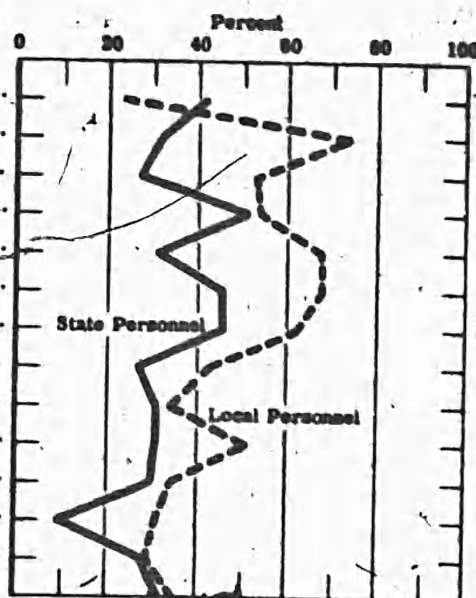
<sup>10</sup> See items 79 and 80.

## TEACHERS OF CHILDREN WHO ARE BLIND

## QUESTIONS

Do these teachers have adequate preparation in and/or adequate understanding of:

1. Basic orientation to the education of various types of exceptional children?.....
2. Basic principles of child growth and development?.....
3. Planning a curriculum suited to the individual needs and group needs of the pupils?.....
4. Teaching at the appropriate developmental levels of their pupils?.....
5. Planning with groups of pupils so each child participates according to his ability?.....
6. Applying teaching methods used in their specialized area?.....
7. Applying teaching aids used in their specialized area?.....
8. Developing and interpreting educational records?.....
9. Interpreting educational and psychological reports and case histories?.....
10. Making use of medical reports?.....
11. Group intelligence and achievement testing?.....
12. Identifying causes of social and emotional maladjustments?.....
13. Agencies concerned with children who are blind and how to secure their services?.....
14. Services provided for blind children by speech, psychological, medical and other clinics?.....



Graph 1.—Percent of Supervisory Personnel Satisfied with the Preparation of Some Teachers of Blind Pupils

of the blind, in their own particular school systems. Because these opinions are about a rather general class of teachers they cannot be considered conclusive; they do provide a clue to the way in which some teachers are meeting the needs of their pupils. These opinions appear to have implications for both preservice and inservice teacher education programs and for the development of selection and certification standards.

Both groups, the State and local directors and supervisors of special education, were asked specific questions<sup>11</sup> about the professional competence of their teachers. Forty of the State personnel and 38 of the local personnel gave views on the effectiveness of their teachers by replying "yes," "no," or "undecided" to each of the questions. Graph 1 reports the percentage indicating *affirmative* responses to these questions.

Neither group expressed a high degree of satisfaction with the competence of their teachers, but directors and specialists in local school systems were somewhat more satisfied than were those in State departments of education. The unpublished data showed that approximately one quarter of the

<sup>11</sup> See appendix D: Inquiry form EXC-1 (State) and EXC-3 (local); question 4.



supervisory personnel were undecided in responding to the questions, although the State group were slightly more undecided than the local group.

In general, the responses reveal greatest satisfaction with the ability of recently graduated teachers to apply teaching methods used in their specialized area, such as teaching the reading and writing of braille, and greatest dissatisfaction with their ability to identify causes of social and emotional maladjustment. These two views are consistent with the relative need for emphasis on the latter competence as expressed by the competency committee and by the group of teachers who participated in the study. These opinions present a challenge to local school systems and teacher-education institutions to improve the caliber of their preservice and inservice preparation. Even more the challenge is for the teacher himself who wishes to improve his own competence.

Table 3.—Rank Order Ratings of the Importance Which 100 Superior Teachers of the Blind Attached to a List of Practical Experiences in Their Specialized Preparation

Rank order of importance <sup>1</sup>	Practical experiences
Experiences rated VERY IMPORTANT—(1-4)	
1.....	Supervised student teaching of blind children— in the reading of braille.
2.....	in the regular academic subjects.
3.....	in the writing of braille.
4.....	Supervised student teaching of blind children at the elementary level.
Experiences rated IMPORTANT—(5-22)	
5.....	Experiences in drawing educational interpretations from— cumulative educational records on blind children.
6.....	psychological reports on blind children.
7.....	Supervised student teaching of normal children.
8.....	Planned observation— in residential schools for blind children.
9.....	in day schools or classes for blind children.
10.....	Experiences in drawing educational interpretations from— reports of social workers on blind children.
11.....	Planned observation— of conferences of teachers of the blind on pupil placement, curriculum adjustment, child study, and others.
12.....	Student observation (without active participation) of teaching blind children.
13.....	Supervised student teaching of blind children at the nursery school level.
14.....	Planned observation of multiprofessional case conferences held by representatives from such fields as medicine, psychology, education, and social welfare, to study and make recommendations on, individual blind children.
15.....	Experiences in drawing educational interpretations from ophthalmological and other medical reports.
16.....	Supervised student teaching of blind children at the secondary level.
17.....	Planned observation of children with multiple handicaps, including blindness.
18.....	Planned visits to observe the work done by— rehabilitation centers for blind youth and adults
19.....	ophthalmological specialists.
20.....	Visits to the homes of blind children in the company of supervising teachers.

See footnote at end of table.



Table 3.—Continued

Rank order of importance <sup>1</sup>	Practical experiences
	Experiences rated IMPORTANT—(5-22)—Continued
21.....	Planned observation in schools or classes dealing with other types of exceptional children.
22.....	Planned visits to observe the work done by nonschool community organizations offering services to the blind, such as recreation groups, clubs, and community houses.
	Experiences rated LESS IMPORTANT—NONE
	Experiences rated NOT IMPORTANT—NONE

<sup>1</sup> Rank orders were obtained from the weighted mean scores for the 100 participating teachers. For a detailed description of the statistical procedure, see appendix C.

teaching which would increase the teacher's effectiveness within the classroom (items 1, 2, and 3); and in contrast they placed less emphasis on experience outside the classroom such as home visits, observation of children with other handicapping conditions, or visits to nonschool facilities for the blind (items 20, 21, and 22). Here again the views of the teachers are in general consistent with those which they expressed in evaluating the importance of teacher competencies (table 1).

Second, the participating teachers stressed student teaching of the blind at the elementary level, (item 4) as opposed to the nursery school or secondary levels (table 3, items 13 and 16). These opinions may be influenced by the fact that the participants were predominantly elementary teachers (see appendix B), as well as by the fact that the specialized teaching of braille tends to be concentrated in the elementary grades. In the pre-school programs the emphasis is on readiness; at the secondary level where specialized skills have supposedly been mastered, the more capable blind pupils (under supervision) are able to attend regular high schools.

There were two experiences on which the day and residential school teachers expressed statistically significant different opinions. The first of these (table 3, item 4) involved supervised student teaching at the elementary level; the other (item 7) involved supervised student teaching of normal children. The residential school teachers placed higher values on the first of these experiences; the day school teachers on the second. Within the scope of this study it is not possible to ascertain the reasons for the



differences between the opinions of the day and residential school teachers. Perhaps this is another finding which should be investigated by further research.

Especially interesting are the evaluations made by the total group of teachers on the importance of planned observational experiences in residential schools and in day schools (items 8 and 9). Here, where one might expect to find statistically significant differences of opinion, there were none. These data tend to support the theory that blind children require much the same type of teacher regardless of the type of school in which they are enrolled.

The general trend of opinions expressed by teachers concerning the practical experiences listed in table 3 seems to have implications for teachers. It suggests that teachers themselves should seek colleges which give them opportunities for practice teaching and planned observations of various kinds. It further suggests that an adequate college program should include opportunity for a variety of such experiences. Still further, these opinions suggest that requirements for the various kinds of experiences could well be written into professional State and local standards and fostered by persons responsible for preservice and inservice preparation of teachers of the blind.

These opinions also should have significance for administrators who consider the establishment of departments of teacher preparation in the area of the education of the blind. The actual location of this type of program perhaps should be in a community which offers supervised student teaching in all kinds of programs in the education of blind children. Too, there should perhaps be consideration given to the location of such related resources as clinics and agencies which would be helpful in field trips for observation purposes for the student teacher.

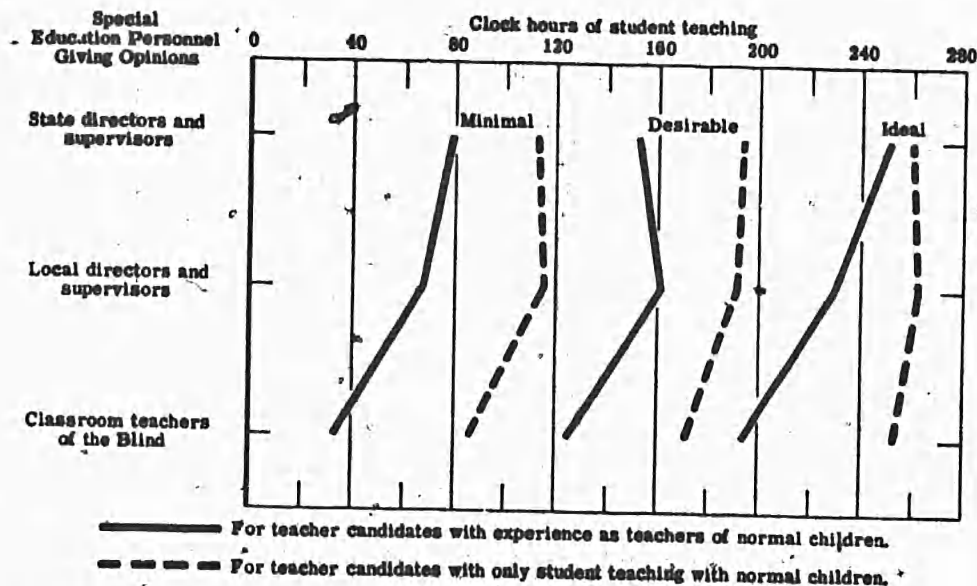
### *Student Teaching of Blind Pupils*

How much specialized student teaching with blind children should be required in the preparation of a teacher of the blind? Is the desired amount the same for experienced regular classroom teachers, as for teacher candidates with only student teaching of normally seeing pupils? Because these questions are frequently asked, some opinions were collected through the inquiry forms which throw some light on these problems.

Opinions were gathered not only from the 100 classroom teachers but also from the State directors and supervisors of special education and the local directors and supervisors of special education.<sup>1</sup>

<sup>1</sup> The questions were answered by 50 of the State personnel, 39 of the local personnel, and 93 of the 100 teachers. See appendix C, page 93, for percent of each group selecting minimal, desirable and ideal number of clock hours.





Graph 2.—Amounts of Student Teaching with the Blind Needed by Those Preparing To Teach in this Area (Expressed in Medians)

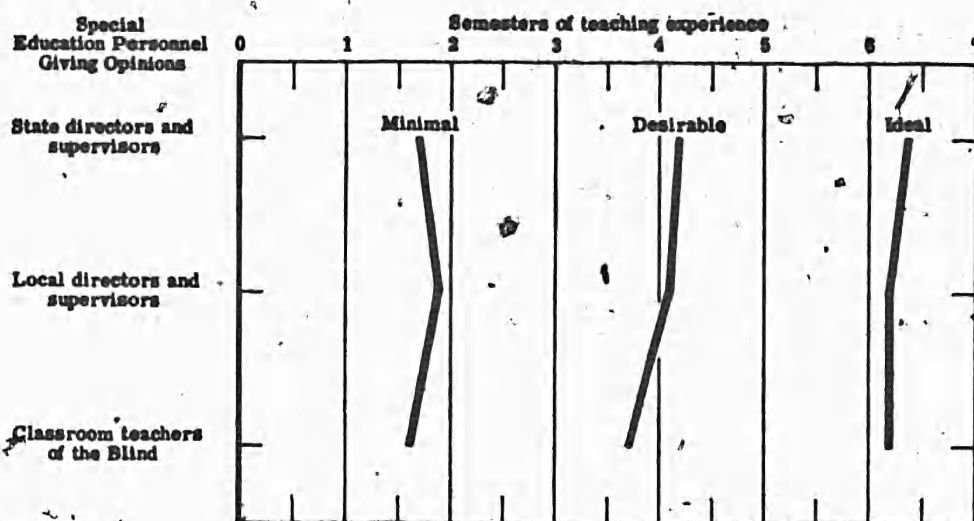
The teachers, directors, and supervisors were given identical questions and requested to indicate on an interval scale the number of clock hours of specialized student teaching considered "minimal," "desirable," and "ideal." The opinions of these special educators are shown in graph 2.<sup>4</sup>

Three patterns stand out in examining this graph. First, there is complete consensus that the amount of specialized student teaching in the area of the blind could be decreased if the teacher-in-preparation has a background of regular classroom teaching experience.

Second, the findings reflect marked difference of opinions on what constitutes the "minimal," "desirable," and "ideal" amounts of student teaching needed. All would choose as the ideal considerably more than they would for "desirable," and for "desirable" somewhat more than they would for "minimal." In other words, there was no point at which the minimal, desirable, or ideal were identical.

Third, there is a striking difference of opinion between the teachers on the one hand and the State and local directors and supervisors on the other concerning the amount of student teaching which could be regarded as "minimal," "desirable," or "ideal." Teachers consistently would be satisfied with a considerably smaller amount of student teaching than

<sup>4</sup> See appendix D: Form EXC-1, questions 5.2 and 5.3; form EXC-3, questions 5.2 and 5.3; form EXC-4A, question 12.



Graph 3.—Amounts of Regular Classroom Teaching Experience Needed by Those Preparing to Teach Blind Pupils (Expressed in Medians)

would the State and local supervisory personnel. Although there is some variation in opinions between the State and local groups, they do tend to be somewhat similar.

To summarize graph 2, the views of the three groups of educators were pooled. The consensus was that teacher candidates with regular classroom teaching experience should have in their specialized preparation approximately 50 clock hours as minimal, 140 as desirable, and 230 as ideal amount of supervised student teaching of blind pupils. For teacher candidates with only student teaching of sighted children, the amounts were approximately 100 clock hours as minimal, 180 as desirable, and 260 as ideal.

### *Teaching Experience with Normally Seeing Pupils*

Should teaching experience with normally seeing children be a prerequisite experience for a person preparing to teach the blind? If so, how much successful classroom teaching of so-called normal children should be "minimal," "desirable," and "ideal" prerequisites for a teacher of blind pupils? Opinions on these questions were collected in the same manner and from the same groups as reported on student teaching<sup>5</sup> and a measure of their central tendency of views is shown in graph 3.

<sup>5</sup> See appendix D: Form EXC-1, question 5.1; form EXC-3, question 5.1; form EXC-4A, question 11. See Appendix C, page 94, for percent of each group selecting minimal, desirable, and ideal amount of teaching experience with "normal" children.



The views of the three groups were very similar. For the prospective teacher of the blind these educators would regard as "minimal" a little less than two semesters of student teaching of normal children. They would regard approximately 2 years of regular classroom teaching as "desirable," and 3 years as "ideal."

### PROFESSIONAL BACKGROUND FOR TEACHER CANDIDATES MOST LIKELY TO SUCCEED

On the hypothesis that certain combinations of educational background and experience tend to contribute to success in teaching, an effort was made to obtain opinions about some of these combinations. The questionnaires sent to State and local directors of special education described six hypothetical candidates with different combinations of academic preparation and experience;<sup>6</sup> participants were asked to choose the two candidates most likely to succeed; not all persons selected two.<sup>7</sup>

The descriptions of the six hypothetical candidates together with the percentage of participants selecting the candidates most likely to succeed are:

Candidates	Percent <sup>1</sup>
1. A 1-year graduate program of specialized preparation (including student teaching in the area of specialization) for experienced regular teachers holding a bachelor's degree in general teacher education; teaching experience with <i>normal</i> children only.	76
2. A 1-year graduate program of specialized preparation (including student teaching in the area of specialization) immediately following the completion of a bachelor's program in general teacher education; no teaching experience with <i>normal</i> or <i>blind</i> children.	44
3. A bachelor's degree in general teacher education, but no specialized preparation; teaching experience with <i>normal</i> and <i>blind</i> children.	32
4. A 4-year undergraduate program of specialized preparation (including student teaching with <i>normal</i> and exceptional children); no teaching experience with <i>normal</i> or <i>blind</i> children.	18
5. A bachelor's degree in general teacher education, but no specialized preparation; teaching experience with <i>normal</i> children only.	2
6. A bachelor's degree in general teacher education (including student teaching of <i>normal</i> children); no teaching experience with either <i>normal</i> or <i>blind</i> children.	2

<sup>1</sup> Percents add to more than 100 since each person was allowed two choices.

The supervisory personnel favored teachers with the most extensive and intensive backgrounds. Approximately 75 percent selected the candidate with regular classroom training and experience plus a year of specialized graduate preparation (including student teaching of blind children). Almost 45 percent chose the candidate with the same qualifications but with no teaching experience. Conversely only 2 percent selected the

<sup>6</sup> See appendix D: Form EXO-3, question 6 and form EXO-3, question 6.

<sup>7</sup> Since the views expressed by the two groups were so similar, the data were pooled.

candidate with no specialized preparation, and no teaching experience with normal or blind children.

The implications of these findings appear to conform with other data presented in this publication. Other things being equal, the most desirable professional qualifications appear to be: general teacher education plus teaching experience with normal children, if at all possible, followed by a 1-year program of specialized graduate preparation in the education of the blind.



## S U M M A R Y

**T**HIS PUBLICATION, in dealing with one aspect of a larger study, has reported specifically on the qualification and preparation needed by teachers of blind children. The findings are based on opinions gathered from 208 special educators: a nationwide sample of 100 classroom teachers of the blind considered superior by their supervisors, 56 special education personnel in State departments of education, 45 supervisors of special education in local school systems, and 7 nationally recognized leaders in the education of the blind.<sup>1</sup> Information was gathered through inquiry forms, conferences, and committee reports. In general, participants tended to express opinions in terms of a somewhat *idealistic* picture of a technically well-trained teacher of the blind. Thus it is unlikely that any one teacher will possess all the recommended competencies, or that any one teacher-education center will be able to present a program incorporating all the ingredients expressed in this report. Instead, the data are intended to set goals for educators in improving their teacher competence and in developing teacher-education programs.

The validity of the findings rests mainly on the expertness of the participants who, because of experience and/or professional preparation, were qualified to give opinions. Since the report contains the collective views of national groups of such educators, the findings represent the best consensus which is currently available to the U. S. Office of Education. The results, valuable though they should be, are not intended to crystallize thinking. Instead, they should stimulate additional deliberation and research. The broad scope of the study and the methodology used tended to produce a general rather than a minute and precise set of findings. Intensive investigation at any one point was not possible. Instead, the report suggests numerous areas where critical shafts of intensive research are needed.

## FINDINGS

Some of the major conclusions drawn from the study are summarized below. Many others are inherent in the data. For the sake of clarity these have been included in earlier pages of this bulletin and left out of this section. The statements which follow represent consensus rather than the details of variability of response.

<sup>1</sup> The total number of college instructors in the Nation specializing in preparing teachers of the blind was found to be so small (approximately 11 in number) that central tendencies of their opinion would probably have lacked validity and therefore were not reported in this bulletin. These data are available in the U. S. Office of Education for Inspection.



*Specialized Competencies Needed by Teachers of the Blind*

1. All groups contributing to this study felt that teachers of blind children basically should possess the same competencies required of qualified teachers of sighted children.
2. The participants believed that teachers of blind children need, in addition, knowledge and abilities over and above those required by regular classroom teachers. This implies that teachers in this field should have a background of general teacher education, including at least some regular classroom teaching experience, plus a sequence of specialized preparation.
3. A major concern of the participants dealt with medical factors related to blindness. However it was their belief that medical knowledge concerning the anatomy, physiology, pathology, and care of the eye should be presented in such a way as to point out to teachers their implications for the education and development of visually handicapped pupils.
4. Teachers need an extensive psychological orientation to blindness. Especially they need to develop skills in identifying the causes of social and emotional adjustment of blind children and in dealing with them. One of the major findings of the study was the emphasis placed on the need for teachers to have skill in the counseling process.
5. They require competence in helping blind pupils develop acceptable patterns of personal hygiene and behavior. The importance of blind children perfecting their relations with visually handicapped and sighted persons was emphasized.
6. Participants were of the opinion that teachers should have developed special procedures for teaching the blind child about his environment. Included would be techniques for bringing objects within arm's reach of pupils, procedures for conserving pupil energy, use of residual vision, and the use of talking books and other specialized equipment.
7. Teachers need to develop skill in helping blind pupils with physical orientation and travel.
8. Teachers need to develop the ability to plan a school program which meets the individual differences of blind pupils, including those who are mentally retarded and gifted.
9. Teachers of the blind need to be able to read and write in braille, to use slate and stylus, and to teach pupils these skills. Also they need to be able to touch type, and to teach it.



10. Too, they need to learn to carry out a curriculum plan which includes teaching blind children in the areas of language development, mathematics, social studies, nature science, music, arts and crafts, and domestic arts. The first four areas received more emphasis than the last three.

11. Teachers need skills in the vocational guidance of pupils.

12. Teachers require knowledge of and ability in selecting specialized materials, equipment, and supplies. They also need to know how to use them effectively.

13. The teacher needs the ability to screen for visual defects and eye conditions, but the ability to check for hearing losses was de-emphasized.

14. Ideally, he needs to be able to administer educational tests especially designed for the blind, and to understand medical and psychological reports.

15. Research studies and professional literature were not emphasized as much as one might have expected; a knowledge of the theory of light and the history of the education of the blind were also de-emphasized as compared with the other competencies listed herein.

16. A knowledge of the role of, and the ability to work with, other specialists, agencies, and organizations was stressed. Included was skill in how, when, and where to make referrals.

17. The participants felt that, in addition to the strong personal qualifications needed by all teachers, there were some characteristics which were needed in greater degree for those who would teach blind children. They must have the personal characteristics to work both as a member of a team and individually with ophthalmologists, psychologists, social workers, and other educators. They must have a pleasing voice which inspires the confidence of pupils. They need to possess those personal qualities which develop a classroom atmosphere which is conducive to good mental and physical health. Teachers need to be more flexible, ingenious, and sympathetic than regular classroom teachers. Good physical and mental health is a prerequisite.

### *Professional Experiences Needed by Teachers of the Blind*

1. Participants expressed the view that the teacher in this field ideally should have 3 years of regular classroom teaching experience. The desirable amount was thought to be 2 years, while the minimal quantity was 1 to 2 semesters of student teaching.

2. The consensus was that teacher candidates with regular classroom teaching experience should have in their specialized preparation approximately 50 clock hours as minimal, 140 as desirable, and 230 as ideal amounts.

of supervised student teaching of blind pupils. For teacher candidates with only student teaching of sighted children, the amounts were approximately 100 clock hours as minimal, 180 as desirable, and 260 as ideal.

3. Ideally, participants favored for teachers of the blind an undergraduate program of general teacher education followed by regular classroom teaching experience, followed in turn by a year of graduate training in the education of the blind which would include a wide range of practical experiences in day and residential schools for the blind, and in agencies concerned with them. However, with present-day shortages of teachers, somewhat lower requirements of specialized preparation and experiences will probably need to be adopted.

4. A sample of 100 teachers rated planned observations of the blind in both residential and day schools as "important." Experiences at the elementary level were rated slightly above those at the secondary and nursery school levels. This is probably due to the fact that most of the sample were elementary teachers.

5. The teachers rated as important experiences in interpreting professional reports, attending inter-professional conferences on blind persons, visiting agencies interested in the blind, and home visits.

#### *Rating of the Proficiency of Some Teachers of the Blind*

1. The nationwide sample of 100 teachers of the blind considered themselves most proficient in specialized teaching procedures and in recognizing and dealing with individual pupil needs; they rated themselves less proficient in teaching procedures involving industrial and domestic arts, and in arts and crafts; they considered themselves least proficient in the testing of hearing and in the administration of individual intelligence tests (usually reserved for other specialists).

2. The sample of teachers considered themselves somewhat less proficient on understanding the implications of blindness and in teaching touch typing. Perhaps these competencies need more attention in college curricula than they now receive.

3. The teachers considered themselves more proficient than the importance warranted in the history of the education of the blind and in



the basic theory of light. Perhaps these competencies need to be de-emphasized in existing college curricula.

4. Directors and supervisors of special education in State and local school systems considered their recently graduated teachers of the blind, in general, to be quite well prepared in specialized teaching methods and aids, but less qualified in identifying causes of social and emotional maladjustment, in the knowledge of specialized agencies connected with the blind and in the services they render, in group testing of intelligence and achievement, and in their knowledge of children with handicaps in addition to blindness.

### *Some Observations Relative to Expressed Opinions*

1. With few exceptions, the views of the classroom teachers, supervisory personnel, and nationally recognized leaders in the education of the blind were very similar. The teachers tended to set their standards slightly lower than the latter two groups.

2. The opinions of teachers in residential schools and in special day classes for the blind tended to be parallel. It would appear that residential school teachers require much the same preparation as day school teachers. However, there were exceptions which differed in degree rather than in kind. For example, day school teachers appeared to need greater ability in cooperating with parents and the public. Perhaps these responsibilities may be reserved for other types of personnel in the residential schools.

3. The views of the responding teachers who received their professional preparation prior to January 1, 1946, showed far significant differences from those of the teachers who received their preparation after that date. This may lend some support to the contention that teacher-education programs have not changed markedly in content or methodology in the last decade or so.

### IMPLICATIONS

What are the implications of these findings?—for the teacher himself?—for the instructors in colleges and universities offering a curriculum of preparation for such teachers?—for those organizations concerned with professional standards?—for the supervisor of a program for the blind?

The teacher himself will have the most to do with the development and maintenance of the competencies which make him effective in his daily work with blind children. From the time he decides to teach in this specialized area and chooses a plan of professional preparation, he himself will largely determine his own professional growth. As he seeks new knowledge and skills, he will look for standards against which to measure his progress as well as for those individuals and agencies equipped to help

## PROFESSIONAL PREPARATION OF TEACHERS OF THE BLIND

THUS FAR this publication has reported on competencies thought to be desirable for teachers of the blind, and on some opinions on effectiveness of recently prepared teachers of blind pupils. If, as it is hoped, the most essential knowledges and abilities have been emphasized, the question then arises: "What educational experiences and professional preparation are needed to develop these competencies?" This section deals with opinions expressed by three groups of special educators concerning experiences which possibly contribute to professional excellence. The groups were:

1. The 100 superior teachers of the blind.
2. State directors and supervisors of special education having some responsibility for education of the blind.
3. Directors and supervisors of special education in local school systems having programs for the blind.

Opinions are reported on: (1) the value of certain practical experiences in the professional preparation of teachers of the blind; (2) the amount of student teaching with blind children thought to be desirable; (3) the amount of teaching experience needed in regular classrooms; and (4) some aspects of the most desirable professional background for teaching blind children.

### PRACTICAL EXPERIENCES IN PROFESSIONAL PREPARATION

How do teachers of the blind value some of the specialized practical experiences which are included—with more or less emphasis—in most teacher-education programs? A list of typical experiences was included in the inquiry form completed by the 100 teachers of the blind<sup>1</sup> to be rated for relative importance.<sup>2</sup>

<sup>1</sup> See appendix D, form EXC 4-A, question No. 8.

<sup>2</sup> The rating scale was identical to the one used by the 100 teachers in evaluating competencies reported in table 1. That is "very important," "important," "less important," and "not important." See appendix C for statistical procedures used.





**The Successful Teacher Provides Group Play Experiences for Young Children**

The list of practical experiences (22 in all) submitted to the teachers centered on supervised student teaching, planned observations, and experience in developing and interpreting tests and records. The entire list arranged according to the average rank order of importance assigned to these experiences by the total group of teachers appears in table 3 on page 68. Opinions were examined for possible differences between (1) teachers with specialized preparation taken prior to January 1, 1946, and after that date, and (2) teachers in day and residential classes. No significant differences were found between the group of teachers with specialized preparation prior to or after January 1, 1946. There was, however, only one difference in the view of day and residential teachers which was statistically significant; it was pointed out in the text.

The 100 teachers attached high importance to all 22 practical experiences. An average rating of "very important" was placed on the top 4 experiences, and an average rating of "important" was placed on the remaining 18. Not one of the practical experiences was valued so low as to have an average rating of "less important" or "not important."

Two or three trends seem to be present in the views of these teachers. First, they placed high importance on practical experience in student

## APPENDIX A.—The Plan and Procedures Used in the Office of Education Study “Qualification and Preparation of Teachers of Exceptional Children”

THE BROAD study on the teachers of exceptional children was undertaken by the Office of Education in collaboration with many leaders in special education from all parts of the Nation, and with the special help of the Association for the Aid of Crippled Children, of New York City. It was directed by a member of the Office of Education staff, who was counseled by two committees. One was an *Office of Education Policy Committee*, whose function it was to assist the director in management and personnel aspects of the study. The other was a *National Advisory Committee* of leaders in special education from various parts of the United States; it was the function of this group to help identify the problems, to assist in the development of the design of the study, and to otherwise facilitate the project. The study also had the counsel of a number of *consultants* who reviewed written material and made suggestions on personnel and procedures. (A complete list of these committee members and consultants appears on pages III, IV, and V.)

The general purpose of the study was to learn more about the qualification, distinctive competencies, and specialized preparation needed by teachers of handicapped and gifted pupils. The term “teachers” was interpreted broadly to mean not only classroom instructors of the various types of exceptional children, but also directors and specialists in State and local school systems and professors of special education in colleges and universities. A separate study was made of the qualification and preparation needed by teachers of children who are: (1) blind, (2) crippled, (3) deaf, (4) gifted, (5) hard of hearing, (6) mentally retarded, (7) partially seeing, (8) socially and emotionally maladjusted, (9) speech handicapped, or (10) handicapped by special health problems, such as rheumatic fever. Separate studies were also made of special education administrative and supervisory personnel in State departments of education (11), and in central offices of local school systems (12). Still another study (13) was made of instructors in colleges and universities preparing teachers of exceptional children. Thus, incorporated into the broad project were 13 smaller studies.

Two techniques were used to gather data on the qualification and preparation needed by special education personnel. One was by means of a series of *inquiry forms*; the other was through a *committee statement* describing desirable competencies. The plan of the study also provided for conferences where practical and possible.



Through the series of inquiry forms, facts and opinions were collected from superior teachers in each of the 10 areas of exceptionality listed above, as well as from directors and supervisors of special education in State and local school systems and from college instructors of special education. By means of the questionnaires, the 13 groups of special education personnel had opportunity to express their views on the distinctive skills, competencies, and experiences which they consider basic for special educators. Through the inquiry forms, status information was also gathered on State certification requirements for teachers of exceptional children, and on existing teacher-education programs for the preparation of these teachers.

Through the committee technique, reports were prepared on the distinctive competencies required by educators in areas paralleling those studied through inquiry forms. There were 13 such committees in all. The names of these committee members were proposed by the National Committee, and the chairmen were appointed by the Commissioner of Education. Committees were composed of from 6 to 12 leading educators in their area of interest who, insofar as possible, had engaged in college teaching, had held supervisory positions in State or local school systems, and had classroom teaching experience with exceptional children.

Three major conferences on the study were called. In September 1952, private agencies interested in gifted and handicapped children met with the Office of Education staff and the National Committee. In March 1953 the Commissioner of Education called a 3-day working conference to study distinctive competencies required by special educators. In October 1954, a week-long work conference was convened in Washington, when working papers incorporating all data collected were presented, reviewed, and modified. The occasion provided opportunity for a free exchange of views and for analysis and interpretation of data.

The findings coming from this study, representing the point of view of no single individual or agency, will, it is hoped, contribute effectively toward the goal of increasing the number of educators competent to teach our exceptional children.

## APPENDIX B.—Information About the 100 Participating Teachers of the Blind

THE DESIGN of the study called for 100 superior classroom teachers of the blind to supply facts and opinions through an extensive inquiry form. An effort was made to secure a representative sampling of superior teachers throughout the Nation by establishing a quota for each State and by providing guidelines for the selection of teachers within each State. State quotas were based on such factors as child population and special educational facilities.

The guidelines stated: (1) That teachers be currently employed as classroom teachers of blind children; (2) that they be superior in the opinion of their supervisors; (3) that they have specialized preparation for teaching blind pupils; (4) that, insofar as possible, teachers be chosen so that about half of the number would have received their specialized professional preparation before January 1, 1946, and the other half after that date; and (5) that the selection be made as widely as possible from various types of teaching situations, such as residential and day schools, all age levels of instruction, and private and public schools.

In order to obtain 100 completed inquiry forms from teachers who would meet the standards set by the study, it was decided to compile a list of approximately 200 teachers. Actually, State departments of education submitted the names and addresses of 170 teachers of the blind. Inquiry forms were mailed to all of them; 129 completed forms were returned. Twenty-nine respondents did not meet the criteria set up by the guidelines: some were not classroom teachers; others did not have specialized preparation. The forms of the other 100 respondents were collated and data from them were reported in the bulletin.

The inquiry forms filled out by the 100 teachers of the blind were grouped, for purposes of tabulation, into the following categories:

- (a) day school teachers with preparation prior to January 1, 1946 (15).
- (b) day school teachers with preparation since January 1, 1946 (23).
- (c) residential school teachers with preparation prior to January 1, 1946 (35).
- (d) residential school teachers with preparation since January 1, 1946 (27).

Thus, there were, in all, 38 day school and 62 residential school teachers. Grouped according to recency of specialized training, one-half had received their specialized preparation before January 1, 1946, and the other half after that date.<sup>1</sup> Twenty-nine had completed this specialized preparation

<sup>1</sup> Breakdown of background information according to those with preparation prior to and after January 1946 is not given in this appendix, since differences in the views of these two groups were not marked.



at the undergraduate level, 61 at the graduate level, and 10 in an inservice basis in a residential school with no college credit. The forms of these last 10 teachers would not have been collated had there been enough other forms submitted by teachers with specialized training taken for college credit.

Where differences in views were found between the day and residential teachers, and between those with preparation prior to and after January 1, 1946, such differences were pointed out in the text of the bulletin. By and large, however, there was considerable unanimity of opinion among the various groups. The shortcomings of reporting each subgroup separately are clear; since the number of forms collated in any one category would be small, the hazards of drawing implications from the data are obvious. The prime purpose for the selection process was to get as representative a sample as was feasible.

### BACKGROUND INFORMATION ON THE 100 TEACHERS OF BLIND CHILDREN

The reader may want to know something about the school situations in which the 100 superior classroom teachers of the blind were employed as well as about their visual acuity, and professional training. Background information is presented here, but should be interpreted with extreme caution. It is not intended that it should have any program implications, since it was not within the scope of this project to study programs for the education of blind children. This information is presented only because opinions are likely to be influenced by such factors as the type of school organizations in which teachers were employed, the grade level at which they were working, and so on.

Table 1.—Specialized Preparation of the 100 Teachers

Level	Total number of teachers	Teachers in—			
		Day schools		Residential schools	
		Number	Percent	Number	Percent
1	2	3	4	5	6
Total .....	100	38	100	62	100
Without college credit .....	10	1	3	9	14
Undergraduate .....	29	10	26	19	31
Graduate .....	61	27	71	34	55

## TEACHERS OF CHILDREN WHO ARE BLIND

Table 2.—Time of Specialized Preparation

Time of preparation	Total number of teachers	Teachers in—			
		Day schools		Residential schools	
		Number	Percent	Number	Percent
1	2	3	4	5	6
Total .....	100	38	100	62	100
Before teaching blind normal children .....	47	23	61	24	37
Concurrently with teaching blind children .....	53	15	39	38	61

Table 3.—Visual Acuity of the 100 Teachers

Visual acuity	Total number of teachers	Number of teachers in—	
		Day schools	Residential schools
1	2	3	4
Total .....	100	38	62
Normally seeing .....	65	31	34
Partially seeing .....	16	2	14
Blind .....	19	5	14



## TYPES OF EDUCATIONAL PROGRAMS IN WHICH THE RESPONDENTS TAUGHT

According to the teachers' reports, many were teaching at more than one educational level. Some were teaching both preschool and elementary; others were teaching both elementary and secondary. They reported the following responsibilities:

Level	Number of total checks <sup>1</sup>	Number of teachers checking	
		Day school	Residential school
1	2	3	4
Preschool .....	32	23	9
Elementary .....	68	24	44
Secondary .....	40	12	28

<sup>1</sup> All of the 100 teachers answered this question. Several checked more than one level, indicating that their groups extended over a wide range.

The reader will recall that 62 of the participating teachers taught in residential schools and 38 in day school settings. The types of school organizations in which the day school teachers taught are outlined below:

Type of school organization	Total day school teachers
Total .....	38
Blind children enrolled in special braille classes and spending little or no time in the regular classroom .....	4
Spending some of their time but not more than half in regular classroom .....	15
Spending more than half their time in the regular classroom .....	6
Blind children enrolled in a regular classroom and spending some of their time in a special braille class .....	8
Itinerant teacher instructing blind children on an individual or small group basis and consulting with regular classroom teachers who are teaching blind children .....	5

## APPENDIX C.—Information on Statistical Procedures and Results

### STATISTICAL PROCEDURES USED TO ANALYZE DATA REPORTS IN TABLE 1

Each of the 82 competencies (knowledges and abilities) listed in table 1 was rated in two ways by the 100 participating teachers.<sup>1</sup> First they checked whether, in their judgment, each item was "very important," "important," "less important," or "not important" for teaching the blind successfully. Second, they checked whether they considered themselves to be "good," "fair," or "not prepared" in each of these competencies. Then the responses of the 100 teachers were tabulated, and the number of checks in each of the seven columns found.

Each of the checks in the "very important" column was given a weighting of 4; those in the "important" column of 3, those in the "less important" column of 2, and those in the "not important" column of 1.<sup>2</sup> The average weighted score for each item was then calculated; for example, if every respondent rated an item as "very important," its weighted mean score would have been 4. Items were then ranked from highest to lowest, based on these weighted mean scores. They are listed in this order in table 1, with their rank orders ascribed to them.

Also the items were classified into four broad categories:

Weighted mean scores above 3.50 were considered **VERY IMPORTANT**.

Weighted mean scores between 2.5 and 3.49 were considered **IMPORTANT**.

Weighted mean scores between 1.5 and 2.49 were considered **LESS IMPORTANT**.

Weighted mean scores below 1.5 were considered **NOT IMPORTANT**.

The reader will note in table 1 that 30 items fell in the **VERY IMPORTANT** category, 48 in the **IMPORTANT**, and 4 in the **LESS IMPORTANT** category. Not one item was rated **NOT IMPORTANT** on the average.

Ascribing weighted scores to each of the checks in the columns for rating self-competence—**GOOD**, **FAIR**, and **NOT PREPARED**—was a rather complex process since these values were determined so as to be comparable to the "importance" ratings of 4, 3, 2, and 1 (a 4-point scale). First, each of the checks in the **GOOD** column was given a weighting of 3, those in the **FAIR** column of 2, and those in the **NOT PREPARED** column of 1 (a 3-point scale). The mean weighted score of "self competence" was then found for all items together. This was 2.44. Then the standard deviation of 0.70 was found in the distribution. This was done so that

<sup>1</sup> See also appendix D, form EAC 4 A, question No. 3.

<sup>2</sup> This same statistical procedure was used in deriving the rank orders in table 2.



the distance of weightings 3, 2, and 1 from 2.44 could be expressed in z score units. Next the mean weighted score on "importance" ratings for all items pooled together was calculated. This was found to be 3.26. Then the standard deviation for the same distribution was found. It was 0.83. The z scores of the second distribution were equated to the corresponding z scores of the first. Thus, the "z" score for "3" in the distribution of self-competency ratings was found to be +0.80. Using the standard deviation of the first distribution as a unit, this yields  $+0.80 \times 0.83$ , or +0.66. Adding +0.66 to the mean of the first distribution yields  $3.26 + 0.66$  or 3.92. This is the equated score assigned to the original weight of "3." The original and equated scores are as follows.

Original	Equated
3	3.92
2	2.74
1	1.55

The average weighted score of SELF-COMPETENCE for each item was then calculated for each item, and rank orders ascribed based on these scores. These rank order numbers will be found in table 1.

Weighted mean scores above 3.33 were considered GOOD.

Weighted mean scores between 2.14 and 3.32 were considered FAIR.

Weighted mean scores below 2.14 were considered NOT PREPARED.

Weighted averages of importance for the various items ranged from a high of 3.89 to a low of 2.30; weighted averages of self-competence, in terms of converted scores, ranged from a high of 3.80 to a low of 2.06. (Tables with weighted averages for each item are on file in the Office of Education.) This complex method of making mean weighted scores comparable was necessary for a later analysis of the data.

### STATISTICAL PROCEDURE USED TO COMPARE THE RESPONSES OF RESIDENTIAL AND DAY SCHOOL TEACHERS, AND TEACHERS WITH SPECIALIZED PREPARATION PRIOR TO AND SINCE JANUARY 1, 1946

The 109 questionnaires were tabulated so that the responses of the 38 day school teachers could be compared with those of the 62 residential school teachers, and also so the responses of the 50 teachers with specialized preparation taken prior to January 1, 1946, could be compared with the 50 trained after that date.

The differences in opinions expressed by the two groups concerning the "importance" of items listed in table 1, and ratings of "self-competence" on the same items were statistically analyzed. The method used was the

same for both groups. For example, the differences in opinions of residential and day school teachers (where  $X_1$  represents scores for the residential and  $X_2$  for the day teachers) were tested as follows: For each item the average of the importance ratings for the residential-school teachers was computed ( $M_1 = \frac{\sum X_1}{N_1}$ ), and the average for the day-school teachers was computed ( $M_2 = \frac{\sum X_2}{N_2}$ ). The estimated standard deviation of the universes of which the  $X_1$  and  $X_2$  scores were samples were computed ( $\hat{\sigma}_1 = \sqrt{\frac{\sum x_1^2}{N_1 - 1}}$  and  $\hat{\sigma}_2 = \sqrt{\frac{\sum x_2^2}{N_2 - 1}}$ ), and the estimate of the standard error of the difference between the averages was determined ( $\hat{\sigma}_{M_1 - M_2} = \sqrt{\frac{\hat{\sigma}_1^2}{N_1} + \frac{\hat{\sigma}_2^2}{N_2}}$ ). The observed difference between the averages of the two samples ( $M_1 - M_2$ ) was then expressed in z-score units ( $\frac{M_1 - M_2}{\hat{\sigma}_{M_1 - M_2}}$ ), to yield the "critical ratio." (Reference: E. F. Lindquist, *Statistical Analysis in Educational Research*, pages 50-57.) The probability of an average difference as large as, or larger than, the observed average difference being obtained by chance was read from the table of the normal curve ("Proportion of Area Under the Normal Curve Lying More Than a Specified Number of Standard Deviations ( $\frac{x}{\sigma}$ ) from the Mean"). Where differences were statistically significant, they have been pointed out in the text. The raw data, tabulated according to the foregoing categories, are on file in the Office of Education.

### CO-VARIATION (CORRELATION) BETWEEN RATINGS OF IMPORTANCE AND SELF-COMPETENCE

The data summarized in table 1 lend themselves to still another analysis. This concerns the testing of the hypothesis that teachers tend to rate as "important" those competencies on which they rate themselves as "most competent." An examination of the raw data made it evident that testing the significance of the difference between mean ratings of "importance" and "self-competence" of the 100 teachers would not be sufficient. It was also necessary to test the significance of correlations between each individual's rating of "importance" and his rating of "self-competence." Because resources for a complete analysis of the data on the basis of covariation (or correlation) were not available, and because a complete analysis



did not seem necessary, a random sample of items (comprising 10 of the items in an area) was drawn. For each of these items, a "scatter diagram" or "contingency table" was prepared, with the ratings of "importance" on the X-axis and the ratings of "self-competence" on the Y-axis. The coefficient of contingency (C) for the table was then computed. Where necessary, the "importance" ratings of "not important" and "less important" were combined, or the "self-competence" ratings of "not prepared" and "fair" were combined so as to avoid low-frequency intervals.

This step was necessary so as to obtain a fair and stable value of the contingency coefficient. Most of the contingency coefficients were computed from 2 x 2 tables, though some were computed from 3 x 2 tables.

The statistical significance of each contingency coefficient was computed by the chi-square technique with  $(s-1)(t-1)$  degrees of freedom; where  $s$ =number of intervals on the X-axis, and  $t$ =number of intervals on the Y-axis.

For each contingency table, there was computed not only the actual value of C, but also the maximum value of C obtainable from the set of marginal frequencies characterizing the particular contingency table. This maximum was computed by inserting in one (or more) of the cells of the table the highest possible number consonant with the marginal frequencies and a positive relation between X and Y. Because of the small number of degrees of freedom, the numbers to be inserted in the remaining cells of the table were readily determined by reference to the marginal frequencies and the figures in the cell (or cells) already containing the maximum entry. The coefficient of contingency of the table, thus constructed, was calculated in the usual manner. This maximum coefficient of contingency provides a useful reference-value for the evaluation of the contingency coefficient calculated from the original or empirical table.

## STATISTICAL SIGNIFICANCE OF DIFFERENCES BETWEEN AVERAGE RATINGS OF IMPORTANCE AND SELF-COMPETENCE

To determine the statistical significance of the difference between the average importance rating and the average self-appraisal of competence rating on an item as rated by the 100 teachers the procedure employed was as follows:

The self-competence ratings (3-point scores) were equated to their corresponding values on the 4-point score ratings (importance ratings) (see p. 88). The difference between the ratings on importance and self-competence for each teacher was determined ( $I_1 - C_1$ ,  $I_2 - C_2$ , through  $I_{100} - C_{100}$ ; where the subscripts 1 and 2 represent the teachers answering the question). The average difference between the ratings for all teachers was calculated ( $\frac{\sum D}{N}$ ); the standard deviation ( $\sqrt{\frac{\sum D^2}{N} - (M_D)^2}$ ) and the standard error of the average of the differences ( $\frac{\sigma_D}{\sqrt{N}}$ ) was computed; the average difference was expressed in z-score units ( $\frac{M_D}{\sigma_{M_D}}$ ) (this is the "critical ratio").

The probability that a mean difference as large as or larger than the one obtained for a given item would occur by chance was then read from the appropriate table of probabilities. (Reference: Quinn McNemar, *Psychological Statistics*, pp. 73-75.)

In the case of items for which the difference between the average importance rating and the average self-competence rating (converted scores) was less than 0.20, no test of statistical significance was employed. It was considered that differences smaller than 0.20 were too small to have any practical importance, and therefore need not be seriously considered.

In the procedure described above, only paired ratings were employed; thus, if a teacher rated an item for importance, but failed to make a self-competence rating for the item, it was impossible to determine the difference between importance and self-competence of that teacher for that item. The teacher's response to this item was therefore not usable in this calculation. It should be pointed out that all teachers' ratings were used in obtaining the averages for importance on which the ranks in table 1 are based; and similarly, all teachers' ratings were employed in obtaining the averages for self-competence. In these instances, the calculation does not call for the pairing of the two kinds of ratings.



Table A.—Percent of Special Education Personnel Indicating Number of Clock Hours of Student Teaching with Blind Children Needed by Those Preparing to Teach in This Area

Clock hours	For teacher-candidates with regular classroom experience with normal children—percent of personnel rating.			For teacher-candidates with only student teaching of normal children—percent of personnel rating.		
	Teacher	State	Local	Teacher	State	Local
1	2	3	4	5	6	7
<b>MINIMAL</b>						
None	24	15	3	13	7	
1-75	57	33	53	35	22	18
76-150	17	31	39	35	43	61
151-225		18	5	6	19	13
226-300	2	3		11	7	8
Over 300					2	
Number answering	58	39	38	52	42	38
Median	35	79	68	80	113	115
<b>DESIRABLE</b>						
None	2			2		
1-75	18	21	5	2	8	3
76-150	45	28	38	33	8	13
151-225	33	33	49	48	57	63
226-300	2	10	8	13	20	16
Over 300		8		2	6	5
Number answering	55	39	37	46	35	38
Median	125	153	161	171	194	191
<b>IDEAL</b>						
None	7					
1-75	7	3	3	2		
76-150	21	10	5		6	
151-225	26	15	39	22	9	11
226-300	37	62	53	72	76	80
Over 300	2	10		4	9	9
Number answering	57	39	36	51	33	35
Median	193	252	229	253	260	262

Table B.—Special Education Personnel Rate Amount of Teaching Experiences with Normal Children Needed by Those Preparing to Teach Blind Children

Teaching experience with normal children	Percent of personnel rating		
	Teacher	State	Local
1	2	3	4
<b>MINIMAL</b>			
None.....	12	15	11
One semester, half-time student-teaching.....	21	23	23
One semester, full-time student-teaching.....	27	18	17
One year of classroom teaching.....	23	42	37
Two years of classroom teaching.....	16		9
Three years of classroom teaching.....	1	2	3
More than three years of classroom teaching.....			
Number of personnel answering.....	77	40	88
<b>DESIRABLE</b>			
None.....			
One semester, half-time student-teaching.....	6	5	14
One semester, full-time student-teaching.....	17	12	20
One year of classroom teaching.....	32	30	14
Two years of classroom teaching.....	33	46	43
Three years of classroom teaching.....	10	7	9
More than three years of classroom teaching.....	2		
Number of personnel answering.....	69	43	81
<b>IDEAL</b>			
None.....			
One semester, half-time student-teaching.....	2		
One semester, full-time student-teaching.....	3		9
One year of classroom teaching.....	11	10	18
Two years of classroom teaching.....	30	28	18
Three years of classroom teaching.....	46	59	49
More than three years of classroom teaching.....	8	3	6
Number of personnel answering.....	61	39	82



## APPENDIX D.—Excerpts From Inquiry Forms

### EXCERPTS FROM INQUIRY FORM FILLED OUT BY TEACHERS OF BLIND CHILDREN

#### *The Office of Education Study*

"QUALIFICATION AND PREPARATION OF TEACHERS OF EXCEPTIONAL CHILDREN"

#### INQUIRY FORM EXC-4A: For Teachers of Blind Children

Miss  
Mrs.

- 1.1 Your name Mr. .... Date .....
- 1.2 Your mailing address .....  
City (or Post Office) ..... State .....
- 1.3 Name and location of school in which you teach .....
- 1.4 Indicate the type of school organization in which you teach by checking ☒ ONE of the following:
- ☐ Residential school for blind children
  - ☐ Blind children enrolled in a *special braille class*, spending little or no time in the regular classroom
  - ☐ Blind children enrolled in a *special braille class*, spending some of their time but not more than half in the regular classroom
  - ☐ Blind children enrolled in a *special braille class*, spending more than half their time in the regular classroom
  - ☐ Blind children enrolled in a *regular classroom*, spending some of their time in a special braille class
  - ☐ Itinerant teacher instructing blind children on an individual or small group basis and consulting with regular classroom teachers who are teaching blind children
  - ☐ Other (specify): .....
- 1.5 Indicate by filling in the blanks:
- Total number of pupils in your class. ....
- Number of pupils in your class whom you classify as blind. ....
- Number of pupils in your class whom you classify as partially seeing. ....
- 1.6 Indicate the group, or groups of blind children which you teach by checking ☒ ONE or MORE of the following:
- ☐ Nursery or Kindergarten ☐ Elementary ☐ Secondary
- 1.7 Indicate the period in which you took the *major* part of your specialized preparation which led to your *initial* certification or approval as a teacher of blind children by checking ☒ ONE of the following:
- ☐ Prior to December 31, 1945. ☐ Since January 1, 1946.

IN PUBLISHED REPORTS, OPINIONS EXPRESSED THROUGH THIS  
INQUIRY WILL NOT BE IDENTIFIABLE WITH THE NAMES OF THE  
PERSONS COMPLETING THE FORM

## TEACHERS OF CHILDREN WHO ARE BLIND

- 1.8 Indicate the plan by which you received the major part of your specialized preparation in the education of the blind.

(Place ONE check  $\checkmark$  in the appropriate square in the table below

AND

If you have had *additional* preparation by other plans, indicate this by placing X's in ONE or MORE of the appropriate squares.)

Type of program		Prior to on-the-job teaching experience with so-called normal children		After on-the-job experience with so-called normal children	
		Prior to teaching blind children	Concurrently with teaching blind children	Prior to teaching blind children	Concurrently with teaching blind children
Program offered at:	Level:				
An accredited <sup>1</sup> college or university, which consisted largely of work taken during the regular academic year	Undergraduate				
	Graduate				
An accredited college or university, which consisted largely of summer school sessions	Undergraduate				
	Graduate				
A residential school for the blind independent of a degree-granting institution (therefore without college credit)					

Other (Specify—inservice program offered by a school or school system, etc.):

<sup>1</sup> An accredited college or university is defined by the Division of Higher Education, U. S. Office of Education, as an institution certified by the American Association of Colleges for Teacher Education, or by one of the regional Associations of Colleges and Secondary Schools.

- 1.9 Indicate your visual acuity by checking  $\checkmark$  ONE of the following:

\_\_\_\_\_ Normal vision    \_\_\_\_\_ Partially seeing    \_\_\_\_\_ Blind



3. In your present position as a teacher of blind children, how important is it that you possess the following competencies?

(Check ☐ ONE of the four columns on the *left* for each item.)

AND

How do you rate your competency at each of the items listed?

(Check ☐ ONE of the three columns on the *right* for each item.)

Very important	Important	Less important	Not important	ITEM	Good	Fair	Not prepared
				<i>A knowledge and/or understanding of—</i>			
				3.1 the causes of the various conditions which result in blindness or loss of vision.			
				3.2 the general plan of medical treatment of the different conditions which result in blindness or loss of vision.			
				3.3 the general meaning of the diagnosis and prognosis of the visual condition for each blind pupil in the class.			
				3.4 the medical, emotional, psychological, social and educational implications of blindness.			
				<i>The ability—</i>			
				3.79 to write braille with ease (teacher's own ability.)			
				3.80 to develop and prepare work sheets and experience stories in braille.			
				3.81 to touch type (teacher's own ability).			
				3.82 to enunciate clearly and pronounce correctly in a pleasing voice.			

<sup>1</sup> All of the 82 items appearing in table 1 were included in this item in the inquiry form, although not in the same order as in the table.

5. Do you consider the following experiences "very important," "important," "less important" or "not important" in the specialized preparation of teachers of blind children? (Check ☐ ONE of the four columns on the left for each item.)

Very important	Important	Less important	Not important	ITEM
				5.1 Supervised <i>student-teaching</i> of so-called normal children.
				<i>Supervised student-teaching of blind children—</i>
				5.2 in the reading of braille.
				5.3 in the writing of braille.
				5.4 in the regular academic subjects.
				5.5 at the nursery school level
				5.6 at the elementary level
				5.7 at the secondary level.
				5.8 <i>Student-observation</i> (without active participation) of teaching of blind children.
				<i>Planned observation—</i>
				5.9 in day schools or classes for blind children.
				5.10 in residential schools for blind children.
				5.11 in schools or classes dealing with other types of exceptional children.
				5.12 of children with multiple handicaps including blindness.
				5.13 of multi-professional case conferences (held by representatives from such fields as medical, psychological, educational and social welfare) to study and make recommendations on individual blind children.
				5.14 of conferences of "on-the-job" teachers of the blind on pupil placement, curriculum adjustment, child study, etc.
				5.15 Visits to the homes of blind children in the company of supervising teachers.
				<i>Planned visits to observe the work done by—</i>
				5.16 rehabilitation centers for blind youth and adults.
				5.17 ophthalmological specialists.
				5.18 nonschool community organizations offering services to the blind such as recreation groups, clubs and community houses.
				<i>Experiences in drawing educational interpretations from—</i>
				5.19 ophthalmological and other medical reports.
				5.20 psychological reports on blind children.
				5.21 reports of social workers on blind children.
				5.22 cumulative educational records on blind children.

6. Are there personal characteristics needed by a teacher of blind children which are different in *degree* or *kind* from those needed by a teacher of so-called normal children?.....

Yes ☐ No ☐

If your answer is "Yes," please list and comment. (Attach an additional page if necessary.)



11. Indicate (1) the amount of successful *classroom teaching* of so-called normal children which you believe should be *minimal*, *desirable*, and *ideal* prerequisites for a teacher of blind children, and (2) the amount of teaching of so-called normal children which you have had. (Place ONE check  $\checkmark$  in *each* column on the *right* opposite the appropriate amount.)

Amount of teaching of so-called Normal Children as a prerequisite for teaching blind children	Minimal	Desirable	Ideal	Amount which you have had
No teaching of normal children.....				
At least 1 semester of half-time student-teaching with normal children (or equivalent).....				
At least 1 semester of full-time student-teaching with normal children (or equivalent).....				
At least 1 year of on-the-job classroom teaching with normal children.....				
At least 2 years of on-the-job classroom teaching with normal children.....				
At least 3 years of on-the-job classroom teaching with normal children.....				
Other (specify):.....				

12. Indicate (1) the amount of *student-teaching* with blind children that you believe should be *minimal*, *desirable* and *ideal* prerequisites for a teacher of the blind, and (2) the amount of *student-teaching* of blind children you have had. (Check  $\checkmark$  in *each* column on the *right* opposite the appropriate amount.)

Amount of student-teaching of blind children needed as a prerequisite for on-the-job teaching of blind children.	For experienced regular classroom teachers			For teacher-candidates with only student-teaching of so-called normal children			Amount which you have had
	Minimal	Desirable	Ideal	Minimal	Desirable	Ideal	
No student-teaching of blind children.....							
1-75 clock hours.....							
76-150 clock hours.....							
151-225 clock hours.....							
226-300 clock hours.....							
Other (specify):.....							

## II. EXCERPTS FROM INQUIRY FORMS FILLED OUT BY DIRECTORS AND SUPERVISORS IN (a) STATE DEPARTMENTS OF EDUCATION, AND (b) LOCAL SCHOOL SYSTEMS

### *The Office of Education Study*

"QUALIFICATION AND PREPARATION OF TEACHERS OF EXCEPTIONAL CHILDREN"

INQUIRY FORM EXC-1: For special education personnel (including directors, supervisors, consultants, and coordinators) in *State* education departments

INQUIRY FORM EXC-3: For directors, coordinators, consultants, and supervisors of special education in *local* school systems

Miss

Mrs.

- 1.1 Your name Mr. .... Date .....
- 1.2 Your business address .....  
City (or Post Office) ..... State .....
- 1.3 Your official title .....  
(Specify—Director of Special Education, etc.)
- 1.4 In which area or areas of Special Education do you have responsibility? (Check ☒ as many as are applicable.)
 

<input type="checkbox"/> Blind	<input type="checkbox"/> Gifted	<input type="checkbox"/> Socially maladjusted <sup>1</sup>
<input type="checkbox"/> Crippled <sup>1</sup>	<input type="checkbox"/> Hard of hearing	<input type="checkbox"/> Special health problems <sup>2</sup>
<input type="checkbox"/> Deaf	<input type="checkbox"/> Mentally retarded	<input type="checkbox"/> Speech defective
	<input type="checkbox"/> Partially seeing	

**Instructions:** In answering special area questions throughout pages 1 to 14 of this form, please supply data on those areas in which you have responsibility and, if you wish, in any additional areas in which you have professional preparation and experience.

IN PUBLISHED REPORTS, OPINIONS EXPRESSED THROUGH THIS INQUIRY FORM WILL NOT BE IDENTIFIABLE WITH THE NAMES OF THE PERSONS COMPLETING THE FORM.

Throughout the inquiry form:

- <sup>1</sup> The term "crippled" includes the cerebral palsied.
- <sup>2</sup> The term "socially maladjusted" includes the emotionally disturbed.
- <sup>3</sup> The term "special health problems" includes children with cardiac conditions, tuberculosis, epilepsy, and below-par conditions.



## 4. (Completed by State personnel only)

How do you evaluate, in general, the professional preparation of "teachers of exceptional children" employed in your State who, within the last 5 years, have completed a sequence of courses of specialized preparation? <sup>1</sup>

<sup>1</sup> The definition of a "sequence of courses" which appears on page 5 of the 1949 publication "Opportunities for the Preparation of Teachers of Exceptional Children" (a cooperative study sponsored by the National Society for Crippled Children and the United States Office of Education) has been adopted for use throughout this study. A "sequence of courses" involves 9 to 12 semester hours made up of (1) a study of the characteristics of the particular condition under consideration, (2) a study of teaching methods and curriculum adjustment, and (3) observation and student-teaching in the specialized area.

(Answer the following questions by placing +, 0, or - in the respective columns for each area you complete, according to the following key.)

+ = yes  
0 = uncertain or undecided  
- = no

ITEM	Blind	Crippled	Deaf	Gifted	Hard of hearing	Mentally retarded	Partially seeing	Socially maladjusted	Special health problems	Speech defective
Do these teachers have adequate preparation—										
4.3 in developing and interpreting educational records?										
4.4 in interpreting psychological and medical reports?										
4.5 in diagnosing causes of social and emotional maladjustments?										
4.6 in group intelligence and achievement testing?										
Do these teachers have an adequate understanding—										
4.7 of the basic principles of child growth and development?										
4.8 of methods and teaching aids used in their specialized area, and how to apply these to their teaching?										
4.9 of the relationship between general and special education?										
4.10 Do these teachers have the ability to plan with groups of pupils so as to provide for group participation according to each child's abilities?										



- 4.11 Do these teachers have the ability to plan a curriculum suited to the individual and group needs of their pupils?
- 4.12 Do these teachers, upon graduating, have a working knowledge about agencies concerned with exceptional children, the services they offer, and how to secure these services?
- 4.13 Are these teachers, upon graduating, sufficiently familiar with the services provided for exceptional children by speech, psychological, and medical clinics, and so on?
- 4.14 Do these teachers have an adequate basic orientation to the education of various types of exceptional children?
- 4.15 Are these teachers able to ascertain and to teach at the appropriate developmental levels of their pupils?

348141°-56-8

- 
- ERIC  
Full Text Provided by ERIC



ERIC  
Full Text Provided by ERIC



ERIC  
Full Text Provided by ERIC



ERIC  
Full Text Provided by ERIC



ERIC  
Full Text Provided by ERIC



ERIC  
Full Text Provided by ERIC



ERIC  
Full Text Provided by ERIC



- 4.10 of the teaching aids and equipment used in their specialized areas and how to apply these to their teaching?
- 4.11 Do these teachers have the ability to plan with groups of pupils so as to provide for group participation according to each child's abilities?
- 4.12 Do these teachers have the ability to plan a curriculum suited to the individual and group needs of their pupils?
- 4.13 Do these teachers, upon graduation, have an adequate working knowledge about agencies concerned with exceptional children, the services they offer, and how to secure these services, when they enter the field?
- 4.14 Do these teachers, upon graduation, have sufficient familiarity with services provided for exceptional children by speech, medical, psychological, and other clinics?
- 4.15 Do these teachers have an adequate basic orientation to the education of various types of exceptional children?
- 4.17 Do these teachers tend to teach at an appropriate level and not above or below the developmental level of their pupils?

<sup>1</sup> A sequence of specialized preparation involves three courses or at least 9 to 12 semester hours made up of (1) a study of the characteristics (physical, mental, and emotional) of the particular condition under consideration; (2) a study of the teaching methods and curriculum adjustments needed; and (3) observation and student-teaching in the specialized area. This definition appears on page 5 of the 1949 publication "Opportunities for the Preparation of Teachers of Exceptional Children," (a cooperative study sponsored by the National Society for Crippled Children and Adults, Inc., and the United States Office of Education), and has been adopted for use throughout this study.

5. (Completed by both State and local personnel)  
Please complete the following table:

ITEM	Blind	Crippled	Deaf	Gifted	Hard of hearing	Mentally retarded	Partially seeing	Socially maladjusted	Special health problems	Speech defective
5.1 Indicate the amount of successful classroom teaching with so-called <i>normal</i> children that you believe should be MINIMAL, DESIRABLE, and IDEAL prerequisites for a special education teacher-candidate. Answer by areas, by placing three letters, (M, D, and I) in each column you complete, according to the following key:										
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> M = minimal  D = desirable  I = ideal </div>										
5.11 No teaching of normal children										
5.12 At least one semester of half-time student teaching with normal children (or equivalent)										
5.13 At least one semester of full-time student teaching with normal children (or equivalent)										
5.14 At least 1 year of on-the-job classroom teaching with normal children										
5.15 At least 2 years of on-the-job classroom teaching with normal children										



- 5.16 At least 3 years of on-the-job classroom teaching with normal children.....
- 5.17 *Other* (specify): .....

5.2 Indicate the amount of student-teaching with *exceptional children* which you believe should be MINIMAL, DESIRABLE, and IDEAL prerequisites for special education teacher-candidate who is a successful regular classroom teacher.

(Use the M, D, and I key as in item 5.1.)

No student-teaching in the specialized area.....

1-75 clock hours<sup>1</sup> .....

76-150 clock hours .....

151-225 clock hours .....

226-300 clock hours .....

*Other* (specify): .....

5.3 Indicate the amount of student-teaching with *exceptional children* which you believe should be MINIMAL, DESIRABLE, and IDEAL prerequisites for a special education teacher-candidate who has *only student-teaching with normal children*.

(Use the M, D, and I key as in item 5.1.)

No student-teaching in the specialized area.....

1-75 clock hours .....

76-150 clock hours .....

151-225 clock hours .....

226-330 clock hours .....

*Other* (specify): .....

<sup>1</sup> One semester hour = 15 clock hours; one quarter hour = 10 clock hours; one academic year = 450 clock hours.

## 6. (Completed by both State and local personnel.)

Below are the qualifications of six candidates for positions as teachers of exceptional children. In your opinion which TWO would be the *most* likely to succeed, and which TWO would be *least* likely to succeed?

(Assume the personality and physical characteristics of the candidates and the calibre of professional preparation to be comparable.) Answer, by areas, by placing two "M's" in each column you complete, according to the following key:

M = Most likely to succeed.

(We realize the items below are not easy to analyze, but your reaction to this question is extremely important, so please give the items your best consideration.)

ITEM	Blind	Crippled	Deaf	Gifted	Hard of hearing	Mentally retarded	Partially seeing	Socially maladjusted	Special health problems	Speech defective
CANDIDATE A: A 4-year undergraduate program completed of specialized preparation (including student-teaching with normal and exceptional children) but <i>without</i> on-the-job teaching experience with <i>normal</i> or <i>exceptional</i> children.										
CANDIDATE B: A 1-year graduate program completed of specialized preparation (including student-teaching in the specialized area) immediately following the completion of a bachelor's program in general teacher education, but <i>without</i> on-the-job teaching experience with <i>normal</i> or <i>exceptional</i> children.										



CANDIDATE C: A 1-year graduate program completed of specialized preparation (including student-teaching in the specialized area), for experienced regular classroom teachers holding a bachelor's degree in general teacher education, and *with* on-the-job teaching experience with *normal* children only.

CANDIDATE D: No specialized teacher preparation but holding a bachelor's degree in general teacher education; no teaching experience with exceptional children, but *having* teaching experience with normal children.

CANDIDATE E: No specialized teacher preparation but holding a bachelor's degree in general teacher education (including student-teaching with normal children), but *without* on-the-job teaching experience with *normal* or *exceptional* children.

CANDIDATE F: No specialized teacher preparation at a college or university but holding a bachelor's degree in general teacher education, and *with* on-the-job teaching experience both with *normal* and with *exceptional* children in the specialized area.